

*TRAFFIC SPEED REPORT NO. 83**MAY, 1967**NO. 9**Joint  
Highway  
Research  
Project**PURDUE UNIVERSITY  
LAFAYETTE INDIANA**by  
TAMMAN NAKKASH*



# Progress Report

## TRAFFIC SPEED REPORT NO. 83

TO: G. A. Leonards, Director  
Joint Highway Research Project

May 11, 1967

FROM: H. L. Michael, Associate Director  
Joint Highway Research Project

File: 8-3-3

Project: C-36-10C

Attached is a Progress Report entitled "Traffic Speed Report No. 83." This report is another in our continuing series of reporting speed trends. This one is for data collected in August through October 1966. The study and report were performed by Mr. Tammam Nakhash, a Graduate Instructor in Research on our staff.

The findings of the study indicate a continuation of the increasing trend of higher speeds of all types of vehicles on all types of highways. Although the annual trend is small, about one mile per hour, the trend is unmistakable.

The report is presented for information and for the record. Copies will be forwarded to the Bureau of Public Roads for their use with data from other states in developing speed trend data for the nation and for regions. Copies are also annually furnished the Indiana State Police, the Indiana Office of Traffic Safety and the Indiana Traffic Safety Council, Inc. Approval of such distribution in addition to the normal distribution is requested.

Respectfully submitted,

*Harold L. Michael*  
Harold L. Michael  
Associate Director

HLM:ss

Attachment

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Progress Report

TRAFFIC SPEED REPORT NO. 83

by

Tamman Nakkash

Graduate Assistant in Research

Joint Highway Research Project

File No: 8-3-3

Project No: C-36-10C

Purdue University

Lafayette, Indiana

May 11, 1967



## ABSTRACT

This report is the annual, continuing study of the speeds of vehicles on rural Indiana highways. Observations of spot-speeds were taken on interstate, other four lane, and two lane highways throughout the state during the months of August through October, 1966.

Analysis of the speeds recorded showed that the over-all average speed for passenger cars was 62.0 miles per hour. The over-all average speed for trucks on the three types of highways was 53.8 miles per hour.

These average speeds showed an increase from the values measured in August and September, 1965. In fact, the average over-all speed of passenger cars reported in this study for 1966 is the highest which has been found to date in this continuing study in progress for over 20 years. The over-all average speed for trucks was also higher than in 1965 and exceeded only by the value reported in July, 1964.

The trend in the average speed of vehicles on rural Indiana highways is still increasing.

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## TRAFFIC SPEED REPORT NO. 83

During August through October, 1966, observations were made to determine free-flow spot-speeds of vehicles on rural Indiana highways. To permit comparison of speeds observed in this study to those observed in previous studies, the same locations on specified Federal and State highways were used, except in one case, where station 4 had to be moved 4.6 miles North relative to its location in the previous studies in order to avoid measuring speeds on a section under construction. The same locations were used so as to minimize variations in the speeds due to different physical features of roadways. The observation stations were on level, tangent sections of rural highways. The observations were made during day light and under favorable weather conditions.

To compare the compliance of motorists with legal speed limits, vehicles were classified as Indiana Passenger cars, non-Indiana Passenger cars, trucks weighing less than 5,000 pounds, and trucks weighing 5,000 pounds or more.

State wide speed limits for rural highways in Indiana, if not otherwise posted, are as follows: 70 miles per hour on interstate highways for passenger cars and trucks weighing less than 5,000 pounds, 65 miles per hour on other highways for passenger cars and trucks weighing less than 5,000 pounds, 55 miles per hour for trucks weighing 5,000 pounds or more on divided highways with a median of 20 feet or more, and 50 miles per hour for trucks weighing 5,000 pounds or more on other highways. All Interstate and four lane highways observed in this study were divided by a median of at least 20 feet. The stated speed limits were applicable on all Interstate, four lane, and two lane highways observed in this study, except for Interstate Route 80 where a speed limit of 60 miles per hour was posted at the section observed.



It was determined in previous studies that a sample of vehicle speeds from four stations on each type of highway would give a representative sample of traffic speeds. The locations of the stations used for this study were as follows: (see Figure A) .

#### Interstate Highways

- |         |                                          |
|---------|------------------------------------------|
| 1. I-80 | 0.7 Miles East of Junction of S. R. 912  |
| 2. I-65 | 1.0 Mile West of Junction of S. R. 334   |
| 3. I-74 | 1.0 Mile East of Junction of Post Road * |
| 4. I-65 | 7.5 Miles North of Junction of S. R. 160 |

#### Four Lane Highways

- |             |                                             |
|-------------|---------------------------------------------|
| 5. U. S. 31 | 1.2 Miles South of Junction of S. R. 33     |
| 6. U. S. 52 | 1.0 Mile East of Junction of S. R. 28       |
| 7. U. S. 41 | 1.0 Mile North of South Junction of S. R. 2 |
| 8. U. S. 52 | 1.0 Mile West of Klondike                   |

#### Two Lane Highways

- |              |                              |
|--------------|------------------------------|
| 9. U. S. 41  | 1.0 Mile North of Boswell    |
| 10. U. S. 52 | 2.0 Miles North of Templeton |
| 11. U. S. 31 | 3.0 Miles South of Rochester |
| 12. S. R. 25 | 0.7 Miles West of Americus   |

#### Sample Size

Computations based on the results of the 1965 speed study indicated that a minimum sample size of 186 speeds of passenger cars would be necessary to be able to determine a 95% confidence interval estimate of the true average speed not greater than two miles per hour. Similarly a 90% confidence interval estimate of the true average mean speed of heavy trucks not greater than four miles per hour required a minimum sample size of 24 speeds. The computation of these sample sizes is included in the Appendix.

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\*

Station location was moved 4.6 Miles North relative to previous studies location to avoid a construction area at the time of this study.



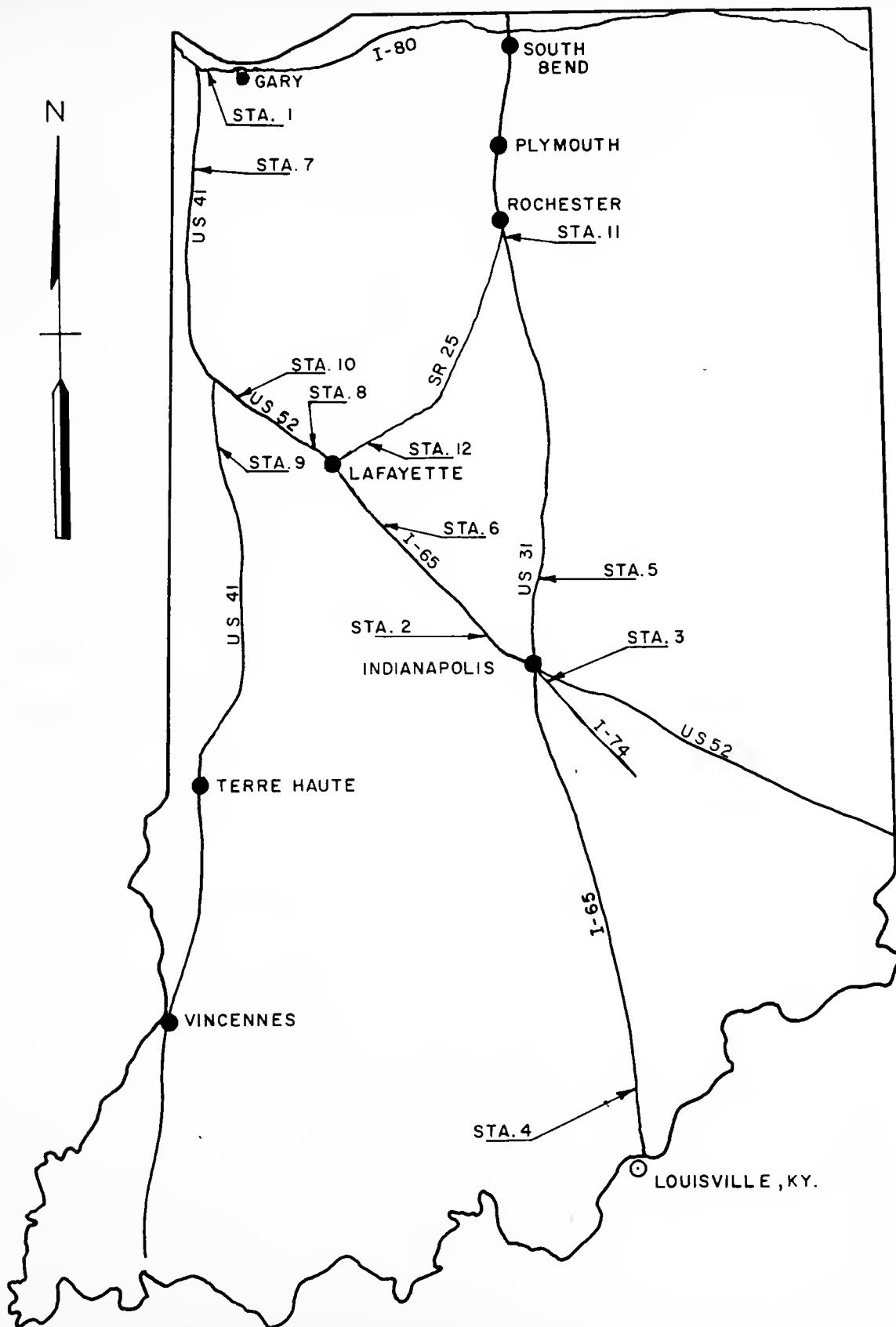


FIG. A - LOCATIONS OF SPEED-STUDY STATIONS



The minimum sample size was based on the variation of the data for all stations from the 1966 speed study. To assure that the desired confidence level would be obtained for each station, more than the minimum sample size required was taken at each site.

#### Equipment and Field Procedure

The speeds of the vehicles were obtained by the use of an "Electro-Matic" Radar Speed Meter, built by Automatic Signal Division, Eastman Industries, Inc., East Norwalk, Conn. The meter was placed approximately four feet from the edge of the pavement at an angle of less than 10 degrees with the highway centerline. For angles less than 10 degrees, the error in reading the vehicle speed is negligible.

Prior to beginning the study, a test using a "fifth wheel" was performed to determine the accuracy of the radar meter. The fifth wheel was checked for accuracy at a five-mile odometer check section and no significant errors were found in the instrument. The radar unit was found to have an error of less than 1/2 mile per hour; consequently, the use of a calibration curve was deemed unnecessary. During the observations at a station, the radar meter was checked periodically with the 60 mile per hour tuning fork to assure the accuracy of the readings.

Each vehicle for which a speed was recorded was free flowing (the speed of the vehicle should not have been affected by other vehicles traveling in the same direction).

To avoid influencing the vehicles on the facility, the vehicle which was used in the study was not parked on the roadside at the observation station. The vehicle was parked on a side road in the vicinity of each station with an attempt to conceal it from the view





of the passing vehicles. On the Interstate facilities the vehicle was parked on frontage roads that paralleled the facility, where possible.

The radar unit was placed on a platform in a green cardboard barrel, similar in size and color to the metal barrels used by the Indiana State Highway Department for roadside trash collection. The cable to the speed recording meter was stretched toward the roadside fence. In this manner, the personnel in the study were at least 25 feet from the roadside and created a minimum influence on the passing vehicles.

### Results of Analysis

The data collected are summarized for each station in Tables 1 to 12 in the Appendix. Tables 13, 14, and 15 summarize the data for the three types of facilities: Interstate, four lane, and two lane. Table 16 summarizes the data for all facilities observed.

Figures 1 to 12 in the Appendix show the accumulative speed curves for each speed station. The accumulative speed curves for the three types of facilities and for all facilities observed are shown in Figures 13, 14, 15, and 16.

The results of this study and the studies conducted since 1957 are tabulated in Table A and shown graphically in Figure B.

In this study the average speeds for each classification of vehicles and each type of highway were as follows:

	Interstate	Four Lane	Two Lane
Passenger cars			
Indiana	62.1	63.1	60.1
Non-Indiana	63.3	64.3	59.5
85th percentile (all)	68.5	69.0	65.5



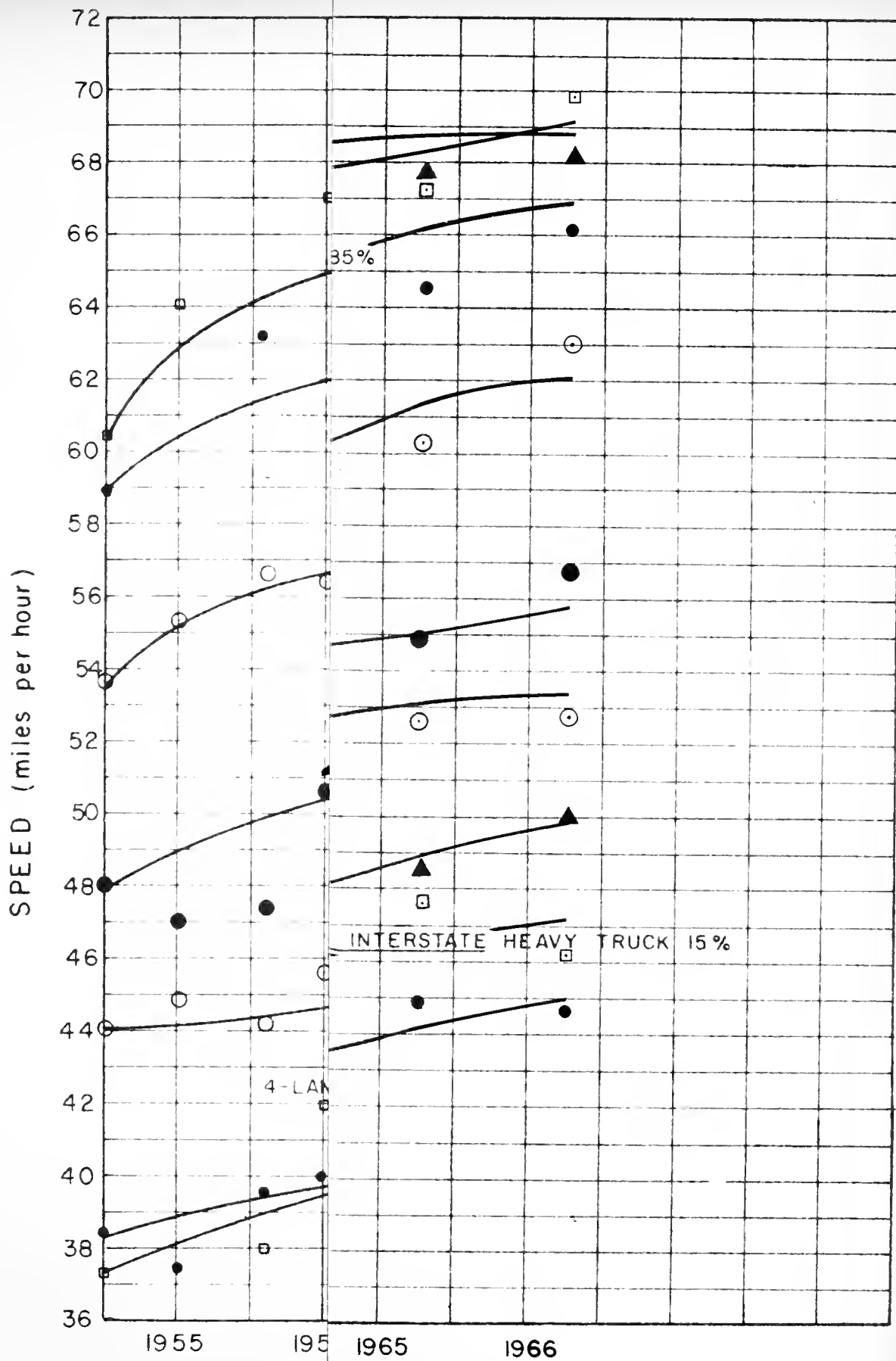
TABLE A

SUMMARY OF SPOT SPEED OBSERVATION  
ON INDIANA HIGHWAYS  
(Free-Moving Vehicles on Level, Tangent Sections)

	Passenger Cars				Trucks		
	Ind. Mean	Non-Ind. Mean	All Mean	All 85 %	Light Mean	Heavy Mean	All Mean
<b>Two-lane Highways</b>							
Aug. '57	55.5	56.7	55.9	62.1	51.7	45.8	47.3
Aug. '58	54.3	56.3	55.0	61.7	53.0	46.3	47.8
Aug. '59	55.6	55.3	55.9	63.2	49.7	46.7	48.0
Sept. '60	55.7	55.6	55.6	62.0	53.0	48.1	49.1
Aug. '61	56.2	55.7	55.9	62.2	50.4	48.9	49.3
Aug. '62	56.7	57.5	57.0	63.7	53.1	49.3	50.1
Jun. '63	56.9	57.7	57.2	64.0	52.3	47.9	49.7
July '64	59.1	60.1	59.5	66.6	53.9	51.7	52.4
Sept. '65	58.2	57.9	58.1	64.6	54.3	50.6	51.7
Sept. '66	60.1	59.5	59.9	65.5	55.4	50.8	52.0
<b>Four-lane Highways</b>							
Aug. '57	57.5	59.9	58.5	64.8	52.0	45.6	47.6
Aug. '58	58.0	59.6	58.7	65.0	54.3	49.0	50.0
Aug. '59	58.4	60.1	59.1	64.5	50.0	53.1	49.5
Sept. '60	59.5	60.2	59.7	65.8	54.8	51.3	52.0
Aug. '61	57.6	57.6	57.6	63.5	53.6	50.3	51.0
Aug. '62	59.2	59.3	59.2	65.8	54.7	51.3	51.9
Jun. '63	60.4	60.6	60.5	66.3	55.0	48.6	51.3
July '64	61.4	63.0	62.0	69.4	55.1	54.5	54.7
Sept. '65	60.1	62.2	61.0	67.2	55.5	53.1	53.7
Sept. '66	63.1	64.3	63.5	69.0	58.7	52.8	54.2
<b>Interstate Highways</b>							
Aug. '61	56.7*	56.9	58.2	64.0	55.9	51.5	52.4
Aug. '62	58.7	59.1	58.8	65.6	55.8	52.7	53.2
Jun. '63	59.7	61.2	60.3	66.3	55.2	51.5	52.7
July '64	61.9	64.0	62.7	70.5	56.8	54.6	55.2
Sept. '65	61.2	62.1	61.5	67.7	54.9	53.6	53.9
Sept. '66	62.1	63.3	62.5	68.5	56.1	54.9	55.3
<b>All Highways</b>							
Aug. '57	56.2	58.3	56.9	63.2	51.8	46.1	47.4
Aug. '58	55.7	57.9	56.5	63.1	53.4	47.5	48.7
Aug. '59	56.5	58.4	57.4	63.5	50.6	47.8	48.6
Sept. '60	57.3	57.6	57.4	63.7	53.7	49.4	50.2
Aug. '61	56.9	56.7	57.3	63.4	53.1	50.3	51.0
Aug. '62	58.2	58.7	58.4	65.1	54.5	51.2	51.8
Jun. '63	59.0	59.9	59.3	65.2	54.1	49.5	51.2
July '64	60.8	62.4	61.5	69.2	55.2	53.7	54.1
Sept. '65	59.9	60.9	60.3	66.7	54.9	52.6	53.1
Sept. '66	61.8	62.4	62.0	68.0	56.7	52.7	53.8

\*Includes data for only three of the four stations on Interstate Highways







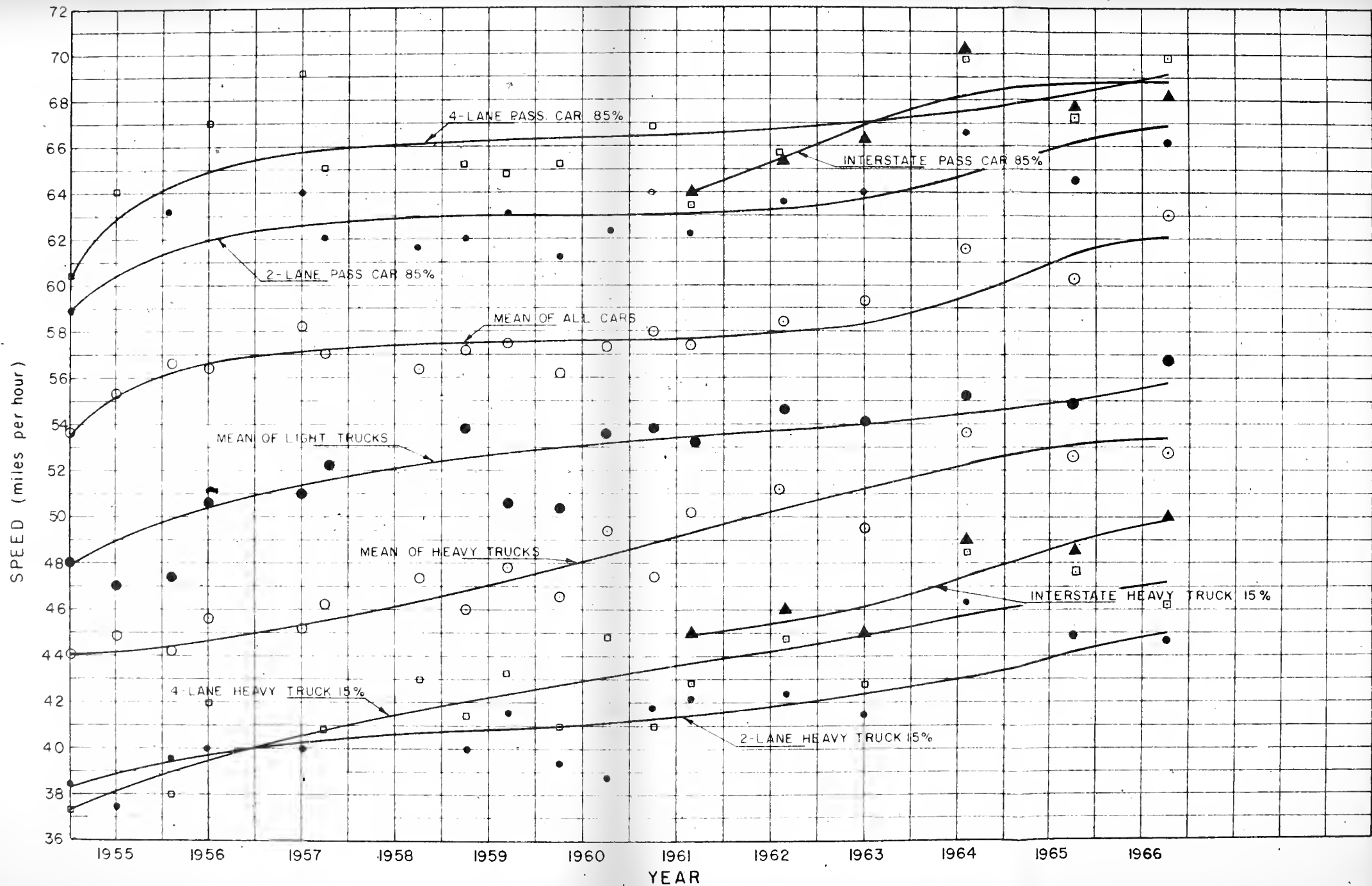


FIG. B - INDIANA RURAL SPEED TRENDS 1955-1966





	Interstate	Four Lane	Two Lane
Trucks			
less than 5,000 lbs.	56.1	58.7	55.4
5,000 lbs. or more	54.9	52.8	50.8

The percent of vehicles at the speed limit or greater for each classification of vehicle and each type of highway were as follows:

	Interstate	Four Lane	Two Lane
Passenger cars			
Indiana	43.1	43.5	24.5
Non-Indiana	18.7	51.3	21.0
Trucks			
less than 5,000 lbs.	1.6	21.9	13.6
5,000 lbs. or more	71.8	43.7	59.0

The percent of vehicles traveling 5 miles per hour or more above the speed limit were as follows:

	Interstate	Four Lane	Two Lane
Passenger cars			
Indiana	2.2	19.7	8.5
Non-Indiana	4.3	21.8	7.7
Trucks			
less than 5,000 lbs.	0	1.2	1.2
5,000 lbs. or more	13.0	11.1	23.4

All exceeding-the-speed-limit figures shown in this section of the report were based on Stations 2,3 and 4. Station 1 was excluded because the posted speed limit of 60 miles per hour is not representative to rural Interstate conditions.



### Summary and Conclusions

The average speeds found in this study were about two (2) miles per hour higher than found in the 1965 study and about one (1) mile per hour higher than those found in 1964. This increase in speed for 1966 when compared to the previous year is better understood if one recalls that the speeds found in 1965 were about one mile per hour lower than those found in 1964, and inconsistent with the general trend of higher speeds in previous years.

Together with the observed trend of higher speeds, it is noted that the speeds for passenger cars on four lane highways were not lower than on Interstate highways. The physical features, shoulders, medians, and access at the observation stations on the four lane facilities were similar to Interstate standards. Similarly, speeds observed at station 1 on I-80, where the posted speed limit was 60 miles per hour were not much lower than speeds observed at other locations on the Interstate system where the speed limit was 70 miles per hour. Drivers, apparently, were more affected by the physical features of the highway for the choice of their speeds than the speed limits..

### Recommendations for Future Studies

It is recommended that the observation station on I-80 be moved. The volume on this highway has increased until it is difficult to get free-flowing vehicles. Moreover this spot is rapidly becoming non-representative of rural Interstate conditions. The posted 60 miles per hour will also likely affect future comparisons with other Interstate stations.



## APPENDIX



### Determination of Sample Size

It was desired that a 95% confidence interval estimate of the true mean of the speeds of passenger cars should not be wider than two miles per hour. For trucks weighing 5,000 pounds or more, it was desired that a 90% confidence interval estimate should not be wider than four miles per hour.

It was assumed that the distribution of speeds was normal. Using the standard deviation of the grouped data of the 1965 study, the minimum sample requirements for passenger cars and trucks were determined.

$$N = \left[ \frac{2 t s}{L} \right]^2$$

where

$N$  = the number of speeds required for the sample

$t$  = tabulated "t" value for  $\alpha/2$  significance, and infinite degrees of freedom

$s$  = estimated standard deviation

$L$  = width of the confidence interval

For passenger cars:

$$N = \left[ \frac{2 \times 1.96 \times 6.95}{2} \right]^2 = 185.5$$

or 186 observations of passenger cars.

For trucks:

$$N = \left[ \frac{2 \times 1.645 \times 5.83}{4} \right]^2 = 23.1$$

or 24 observation of heavy trucks.





TABLE 1 SPEED DATA

Station	1	Highway	I-80	Location	0.7 Mile East of S. R. 912
No. of Lanes	4	Type of Surface	Portland Cement Concrete	Weather	Warm - Clear
This Observation	Last Previous Observation (Speed Report No. 81)				
Date	September 8, 1966	Date	September 8, 1965		
Time	7:45 AM - 10:00 AM	Time	10:00 AM - 1:15 PM		

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
OBSERVATION		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles at or less than	No. of vehicles obs.	217	239	124	189	93	50	103	84	21	27	82	57
	Average speed (m.p.h.)	56.9	61.4	56.5	61.6	57.4	60.9	52.3	53.2	50.9	55.1	52.7	52.3
	Standard deviation	6.65	6.02	7.35	6.23	5.60	5.16	5.25	6.69	6.14	7.84	4.98	5.93
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.4	4.8	0.0	0.0	3.5
	44 m.p.h.	3.2	0.0	3.2	0.0	3.2	0.0	8.7	11.9	14.3	14.8	7.3	10.5
	49 m.p.h.	15.2	2.5	20.2	2.6	8.6	2.0	31.1	26.2	47.6	22.2	26.8	28.1
	54 m.p.h.	30.9	10.5	34.7	10.0	25.8	12.0	65.1	51.2	71.4	40.7	63.4	56.1
Bound	No. of vehicles obs.	94	239	56	189	38	50	46	84	12	27	34	57
	Average speed	56.2	61.4	56.0	61.6	56.5	60.9	50.7	53.2	49.8	55.1	51.1	52.3
	No. of vehicles obs.	123	--	68	--	55	--	57	--	9	--	48	--
	Average speed	57.4	--	56.9	--	58.1	--	53.6	--	52.3	--	53.8	--
	No. of vehicles obs.	94	239	56	189	38	50	46	84	12	27	34	57
	Average speed	56.2	61.4	56.0	61.6	56.5	60.9	50.7	53.2	49.8	55.1	51.1	52.3
	No. of vehicles obs.	123	--	68	--	55	--	57	--	9	--	48	--
	Average speed	57.4	--	56.9	--	58.1	--	53.6	--	52.3	--	53.8	--
	No. of vehicles obs.	94	239	56	189	38	50	46	84	12	27	34	57
	Average speed	56.2	61.4	56.0	61.6	56.5	60.9	50.7	53.2	49.8	55.1	51.1	52.3

\* One Car, 9C M.P.H.



TABLE 2 SPEED DATA

Station 2 Highway I-65 Location 1.0 Mile West of S. R. 334

No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Warm - Clear

This Observation Date September 8, 1966 Last Previous Observation (Speed Report No.     )

Date September 3, 1965

Time 11:00 AM - 1:00 PM Time 1:00 - 3:00 PM

				PASSENGER CARS						TRUCKS					
				All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
				Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
OBSERVATION															
All vehicles at or less than	No. of vehicles obs.			273	239	160	134	113	105	87	74	19	24	68	50
	Average speed (m.p.h.)			63.7	62.2	63.7	61.8	63.7	62.8	54.8	57.1	57.5	56.9	54.1	57.1
	Standard deviation			6.03	5.64	6.27	5.5	5.72	5.8	5.51	3.67	8.36	4.92	4.19	2.95
	24 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.			0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	44 m.p.h.			0.4	0.0	0.0	0.0	0.9	0.0	2.3	0.0	0.0	0.0	2.9	0.0
	49 m.p.h.			1.8	0.4	1.2	0.0	2.7	1.0	12.6	2.7	26.3	8.3	8.8	0.0
	54 m.p.h.			7.7	7.1	7.5	8.2	8.0	5.7	50.6	17.6	31.6	25.0	55.9	14.0
24 or vehicles traveling	59 m.p.h.			18.7	30.1	22.5	31.1	13.3	28.6	78.2	75.7	52.6	66.7	85.3	80.0
	64 m.p.h.			55.7	64.4	58.1	67.2	52.2	61.0	93.1	97.3	68.4	95.8	100.0	98.0
	69 m.p.h.			87.6	87.9	85.0	91.2	91.2	82.9	100.0	100.0	100.0	100.0	--	100.0
	74 m.p.h.			97.1	97.9	96.3	98.5	98.2	97.1	--	--	--	--	--	--
	79 m.p.h.			98.9	100.0	98.8	100.0	99.1	100.0	--	--	--	--	--	--
	84 m.p.h.			99.6	--	99.4	--	100.0	--	--	--	--	--	--	--
Bound	89 m.p.h.			100.0	--	100.0	--	--	--	--	--	--	--	--	--
	No. of vehicles obs.			130	118	86	61	44	57	50	34	9	14	25	20
	Average speed			63.4	62.7	64.1	62.6	62.1	62.8	54.8	57.3	56.8	57.4	57.1	57.2
	No. of vehicles obs.			143	121	74	73	69	48	37	40	10	10	36	30
Bound	Average speed			63.8	61.8	63.2	61.1	64.6	62.9	54.9	56.9	58.2	56.2	54.6	57.1



TABLE 3 SPEED DATA

Station 3 Highway I-74 Location 1.0 Mile East of Post Road  
 No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Warm-Clear  
 This Observation September 8, 1966 Last Previous Observation (Speed Report No. 81)  
 Date September 7, 1965  
 Time 9:00 A.M.-11:15 A.M. Date September 7, 1965  
 Time 10:00 A.M.-12:15 P.M.

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
OBSERVATION		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles at or less than	No. of vehicles obs.	262	242	159	155	103	87	98	59	20	17	78	42
	Average speed (m.p.h.)	60.5	62.3	59.2	61.9	62.4	63.1	54.6	56.0	56.9	56.5	54.0	55.9
	Standard deviation	6.25	6.10	6.07	5.81	6.05	6.53	4.74	4.23	5.09	6.66	4.50	2.81
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.6	0.0
	44 m.p.h.	1.9	0.4	2.5	0.6	1.0	0.0	2.0	1.7	0.0	5.9	2.6	0.0
	49 m.p.h.	5.7	0.8	7.6	0.6	2.9	1.2	11.2	6.8	10.0	11.8	11.5	4.8
	54 m.p.h.	16.8	7.8	20.1	8.4	11.7	6.9	44.9	27.1	30.0	35.3	48.7	23.8
Bound	No. of vehicles obs.	119	119	84	69	35	50	61	19	11	2	50	17
	Average speed	60.8	62.0	60.0	61.8	62.6	62.4	54.6	55.42	55.4	55.0	54.4	55.5
	No. of vehicles obs.	143	123	75	86	68	37	37	40	9	15	28	25
	Average speed	60.2	62.6	58.2	62.0	62.4	64.2	54.6	56.3	58.7	56.7	53.3	56.1
	No. of vehicles obs.	119	119	84	69	35	50	61	19	11	2	50	17
	Average speed	60.8	62.0	60.0	61.8	62.6	62.4	54.6	55.42	55.4	55.0	54.4	55.5
	No. of vehicles obs.	143	123	75	86	68	37	37	40	9	15	28	25
	Average speed	60.2	62.6	58.2	62.0	62.4	64.2	54.6	56.3	58.7	56.7	53.3	56.1
	No. of vehicles obs.	119	119	84	69	35	50	61	19	11	2	50	17
	Average speed	60.8	62.0	60.0	61.8	62.6	62.4	54.6	55.42	55.4	55.0	54.4	55.5



TABLE 4 SPEED DATA

Station 4 Highway I-65 Location 7.5 Miles North of S.R. 160\*  
 No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Warm-clear  
 This Observation Last Previous Observation (Speed Report No. 81)  
 Date September 7, 1966 Date September 10, 1965  
 Time 8:30 A.M.-11:00 A.M. Time 1:30-4:00 P.M.

OBSERVATION		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles at or less than	No. of vehicles obs.	247	231	125	123	122	108	113	67	17	21	96	46
	Average speed (m.p.h.)	64.4	64.1	65.1	63.4	63.8	64.9	53.9	55.3	54.8	56.1	53.8	54.9
	Standard deviation	6.63	6.11	6.78	6.21	6.44	5.93	5.44	5.32	6.62	7.59	5.23	3.9
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	44 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	6.2	3.0	5.9	4.8	6.3	2.2
	49 m.p.h.	2.0	0.9	2.4	1.6	1.6	0.0	21.2	10.5	23.5	19.0	20.8	6.5
	54 m.p.h.	8.1	4.3	7.2	6.5	9.0	1.8	51.3	46.3	35.3	42.9	54.2	47.8
Bound	No. of vehicles obs.	125	231	67	123	58	108	55	67	7	21	48	46
	Average speed	64.4	64.1	64.8	63.4	63.9	64.9	54.4	55.3	54.3	56.1	54.5	54.9
	No. of vehicles obs.	122	-	58	-	64	-	58	-	10	-	48	-
	Average speed	64.5	-	65.3	-	63.7	-	53.5	-	55.1	-	53.1	-
	24 m.p.h.	--	--	--	--	--	--	--	--	--	--	--	--
	29 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	--	100.0	--	100.0	--	--
	34 m.p.h.	98.8	98.3	98.4	99.2	99.2	97.2	--	--	--	--	--	--
	39 m.p.h.	95.1	96.1	94.4	97.6	95.9	94.4	--	100.0	--	100.0	--	--
	44 m.p.h.	80.2	78.8	76.0	79.7	84.4	77.8	100.0	98.5	100.0	95.2	100.0	--
	49 m.p.h.	49.8	49.8	47.2	53.7	52.5	45.4	98.2	97.0	94.1	90.5	99.0	100.0

Previous location 2.9 Miles North of S.R. 160, this observation location was changed to avoid a zone under construction





TABLE 5 SPEED DATA

Station 5 Highway U.S. 31 Location 1.2 Mile South of S.R. 38 Weather Clear, Windy  
 No. of Lanes 4 Type of Surface Asphaltic Concrete Last Previous Observation (Speed Report No. 81)  
 Date October 4, 1966 Date September 7, 1965  
 Time 12:30-3:30 P.M. Time 1:00-3:00 P.M.

OBSERVATION		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles at or less than 20 of vehicles travelling	No. of vehicles obs.	245	260	206	225	39	35	115	91	33	28	82	63
	Average speed (m.p.h.)	60.9	62.9	60.7	62.8	61.9	63.9	54.0	53.7	57.7	59.1	52.6	51.3
	Standard deviation	7.04	7.51	7.31	7.48	5.37	7.72	6.29	6.82	6.94	7.40	5.39	4.93
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	0.0	0.8	0.0	0.9	0.0	0.0	1.7	1.1	0.0	0.0	2.4	1.6
	44 m.p.h.	2.0	1.54	2.4	1.8	0.0	0.0	6.1	4.4	6.1	3.6	6.1	4.8
	49 m.p.h.	6.1	5.0	7.3	4.9	0.0	5.7	20.0	28.6	9.1	7.1	24.4	38.1
	54 m.p.h.	17.1	11.2	18.5	10.7	10.3	14.3	53.0	58.2	30.3	21.4	62.2	74.6
Bound	59 m.p.h.	38.4	28.9	38.8	28.9	35.9	28.6	80.9	80.2	60.6	46.4	89.0	95.2
	64 m.p.h.	69.4	55.8	69.4	57.8	69.2	42.9	95.7	92.3	84.9	75.0	100.0	100.0
	69 m.p.h.	89.4	80.4	88.8	80.9	92.3	77.1	98.3	93.9	93.9	96.4	--	--
	74 m.p.h.	98.8	95.8	98.5	95.6	100.0	97.1	100.0	98.9	100.0	96.4	--	--
	79 m.p.h.	100.0	98.9	100.0	98.7	--	100.0	--	100.0	--	100.0	--	--
	84 m.p.h.	--	100.0	--	100.0	--	--	--	--	--	--	--	--
	89 m.p.h.	--	--	--	--	--	--	--	--	--	--	--	--
	No. of vehicles obs.	120	133	103	115	17	18	60	37	18	10	42	27
	Average speed	58.7	63.2	58.4	62.9	60.0	65.1	54.1	53.8	57.4	58.3	52.7	52.2
	No. of vehicles obs.	125	127	103	110	12	17	55	54	15	18	40	36
	Average speed	63.1	62.7	63.0	62.7	63.4	62.5	54.0	53.6	57.9	59.6	52.5	50.6



TABLE 6 SPEED DATA

Station 6 Highway U.S. 52 Location 1.0 Mile East of S. R. 28 Weather Warm-Clear  
 No. of Lanes 4 Type of Surface Asphaltic Concrete  
 This Observation Last Previous Observation (Speed Report No. 81)  
 Date August 31, 1966 Date August 20, 1965  
 Time 10:00 AM - 12:15 PM Time 9:30 - 11:45 AM

				PASSENGER CARS				TRUCKS			
				All		Indiana		Non-Indiana		All	
OBSERVATION				Last	Present	Last	Present	Last	Present	Last	Present
ALL VEHICLES at or less than	No. of vehicles obs.			216	241	106	142	110	99	77	80
	Average speed (m.p.h.)			61.2	65.0	60.3	65.0	62.0	65.03	55.0	54.2
	Standard deviation			6.40	6.35	6.63	6.75	6.09	5.75	5.30	6.64
	24 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.			0.5	0.0	0.0	0.0	0.9	0.0	0.0	0.0
	44 m.p.h.			2.3	0.4	2.8	0.7	1.8	0.0	2.6	10.0
	49 m.p.h.			3.7	0.8	4.7	1.4	2.7	0.0	16.9	18.3
	54 m.p.h.			14.8	5.8	19.8	7.8	10.0	3.0	49.4	43.0
Bound	No. of vehicles obs.			105	241	48	142	57	99	41	80
	Average speed			62.8	65.0	61.4	65.0	64.0	65.0	56.2	54.2
	No. of vehicles obs.			111	--	58	--	53	--	36	--
	Average speed			59.6	--	59.4	--	59.8	--	53.5	--
	No. of vehicles obs.			105	241	48	142	57	99	41	80
	Average speed			62.8	65.0	61.4	65.0	64.0	65.0	56.2	54.2
	No. of vehicles obs.			111	--	58	--	53	--	36	--
	Average speed			59.6	--	59.4	--	59.8	--	53.5	--
	No. of vehicles obs.			105	241	48	142	57	99	41	80
	Average speed			62.8	65.0	61.4	65.0	64.0	65.0	56.2	54.2



TABLE 7 SPEED DATA

Station 7 Highway U.S. 41 Location 1.0 Mile North of S.R.2

No. of Lanes 4 Type of Surface Concrete Weather Clear

This Observation September 7, 1966 Last Previous Observation (Speed Report No. 81)

Date September 9, 1965

Time 12:30- 2:30 P.M. Time 10:00 A.M.-12:15 P.M.

OBSERVATION		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles at or less than	No. of vehicles obs.	239	227	119	115	120	112	121	120	12	21	109	99
	Average speed (m.p.h.)	61.4	62.9	60.0	61.9	62.9	63.9	53.0	53.4	53.3	57.9	53.0	52.5
	Standard deviation	6.46	6.91	6.34	7.11	6.28	6.59	5.09	6.14	6.79	5.29	4.90	5.91
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	5.0
	44 m.p.h.	1.3	0.4	1.7	0.0	0.8	0.9	5.8	8.3	8.3	0.0	5.5	10.1
	49 m.p.h.	4.6	2.6	5.9	1.7	3.3	3.6	21.5	20.8	25.0	0.0	21.1	25.3
	54 m.p.h.	14.6	9.2	21.0	13.9	8.3	4.5	65.3	50.0	66.7	28.6	65.1	54.6
Bound	59 m.p.h.	32.2	26.0	41.2	33.9	23.3	17.9	89.3	88.3	75.0	66.7	90.8	92.9
	64 m.p.h.	67.8	60.4	75.6	68.7	60.0	51.8	97.5	96.7	100.0	81.0	97.3	100.0
	69 m.p.h.	91.2	82.4	94.1	84.4	88.3	80.4	100.0	100	--	100.0	100.0	--
	74 m.p.h.	98.7	95.6	100.0	94.8	97.5	96.4	--	--	--	--	--	--
	79 m.p.h.	99.6	98.2	--	98.3	99.2	98.2	--	--	--	--	--	--
	84 m.p.h.	100.0	100.0	--	100.0	100.0	100.0	--	--	--	--	--	--
	89 m.p.h.	--	--	--	--	--	--	--	--	--	--	--	--
	No. of vehicles obs.	108	227	65	115	43	112	72	120	3	21	69	99
	Average speed	61.2	62.9	59.3	61.9	64.2	63.9	51.5	53.4	52.7	57.9	51.4	52.5
	No. of vehicles obs.	131	--	54	--	77	--	49	--	9	--	40	--
	Average speed	61.6	--	60.9	--	62.1	--	55.3	--	53.6	--	55.7	--



TABLE 8 SPEED DATA

Station 8 Highway U.S. 52 Location 1.0 Mile West of Klondike

No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Warm Clear

Date August 26, 1966 Last Previous Observation (Speed Report No. 81)

Time 2:45 - 5:00 P.M. Date September 17, 1965 Time 2:30 - 5:00 P.M.

OBSERVATION		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.		283	250	170	157	113	93	77	61	25	16	52	45
Average speed (m.p.h.)		60.4	63.3	59.4	62.8	61.9	64.0	52.9	56.3	54.1	59.3	52.4	55.2
Standard deviation		6.25	6.70	6.44	7.10	5.65	5.94	5.59	5.91	7.41	6.64	4.45	5.30
24 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.		0.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 m.p.h.		1.1	1.6	1.2	2.4	0.9	0.0	5.2	4.9	8.0	6.3	3.9	4.4
49 m.p.h.		5.0	3.2	7.1	5.1	1.8	0.0	31.2	11.5	36.0	6.3	28.9	13.3
54 m.p.h.		17.0	8.0	22.4	8.9	8.9	6.5	55.8	29.5	48.0	18.8	59.6	33.3
59 m.p.h.		40.6	22.4	48.2	24.2	29.2	19.4	87.0	67.2	72.0	43.8	94.2	75.6
64 m.p.h.		72.4	54.0	77.1	58.0	65.5	47.3	97.4	91.8	92.0	75.0	100.0	97.8
69 m.p.h.		93.3	78.8	94.7	80.3	91.2	76.3	100.0	100	100.0	100.0	--	100.0
74 m.p.h.		99.7	96.8	100.0	96.2	99.1	97.9	--	--	--	--	--	--
79 m.p.h.		100.0	98.8	--	98.7	100.0	98.2	--	--	--	--	--	--
84 m.p.h.		--	100.0	--	100.0	--	100.0	--	--	--	--	--	--
89 m.p.h.		--	--	--	--	--	--	--	--	--	--	--	--
No. of vehicles obs.		141	250	81	157	60	93	39	61	14	16	25	45
Average speed		59.5	63.3	58.1	62.8	61.4	64.0	51.8	56.3	52.1	59.3	51.6	55.2
No. of vehicles obs.		142	--	89	--	53	--	38	--	11	--	27	--
Average speed		61.4	--	60.7	--	62.6	--	54.1	--	56.6	--	53.1	--

ALL vehicles  
at or less than





TABLE 2 SPEED DATA

Station 9 Highway U.S. 41 Location 1.0 Mile North of Boswell

No. of Lanes 2 Type of Surface Portland Cement Concrete Weather Warm-Clear

This Observation August 30, 1966 Last Previous Observation (Speed Report No. 81)

Date August 16, 1965

Time 10:15 A.M. - 2:15 P.M. Date August 16, 1965

Time 12:00 - 4:30 P.M.

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
OBSERVATION		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.		205	225	98	115	107	110	131	95	29	23	102	72
Average speed (m.p.h.)		57.4	58.8	58.0	58.3	56.8	59.3	50.4	48.8	54.8	51.7	49.1	47.9
Standard deviation		7.28	7.23	7.74	7.02	6.81	7.45	6.55	5.93	7.67	7.49	5.64	5.09
24 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.1	0.0	0.0	1.0	1.4
39 m.p.h.		0.5	0.0	1.0	0.0	0.0	0.0	2.2	4.2	0.0	4.4	2.9	4.2
44 m.p.h.		3.9	2.2	2.0	2.6	5.6	1.8	15.3	22.1	6.9	26.1	17.7	20.8
49 m.p.h.		13.2	11.1	12.2	11.3	14.0	10.9	50.4	55.8	27.6	34.8	56.9	62.5
54 m.p.h.		33.7	30.2	31.6	30.4	35.5	30.0	73.3	85.3	48.3	60.9	80.4	93.1
59 m.p.h.		62.0	48.0	59.2	48.7	64.5	47.3	88.6	96.8	62.1	91.3	96.1	98.6
64 m.p.h.		84.9	80.0	78.6	82.6	90.7	77.3	97.7	97.9	8.7	91.3	100.0	100.0
69 m.p.h.		95.1	93.3	92.9	96.5	97.2	90.0	100.0	100.0	100.0	100.0	--	--
74 m.p.h.		99.0	98.7	98.0	99.1	100.0	98.2	--	--	--	--	--	--
79 m.p.h.		100.0	100.0	100.0	100.0	--	100.0	--	--	--	--	--	--
84 m.p.h.		--	--	--	---	--	---	---	--	--	--	--	--
89 m.p.h.		--	--	--	---	--	---	---	--	--	---	---	--
No. of vehicles obs.		101	225	52	115	49	110	79	95	19	23	60	72
Average speed		58.1	58.8	59.3	58.3	56.7	59.3	50.6	48.8	56.4	51.7	48.7	47.9
No. of vehicles obs.		104	--	46	--	58	--	52	--	10	--	42	--
Average speed		56.7	--	56.6	--	56.8	--	50.1	--	51.6	--	49.7	--



TABLE 10 SPEED DATA

Station 10 Highway U.S. 52 Location 2.0 Mile North of Templeton

No. of Lanes 2 Type of Surface Asphaltic Concrete Weather Warm-Cloudy

This Observation Last Previous Observation (Speed Report No. 81)

Date August 29, 1966 Date August 19, 1965

Time 9:30 A.M. - 12:10 P.M. Time 9:30 - 11:15 P.M.

OBSERVATION		PASSENGER CARS						TRUCKS			
		All		Indiana		Non-Indiana		All		Less than 5000 pounds	
		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles at or less than	No. of vehicles obs.	190	232	68	97	122	135	68	56	20	13
	Average speed (m.p.h.)	58.8	58.7	58.5	58.7	58.9	58.6	51.5	51.7	50.8	55.7
	Standard deviation	4.95	5.37	4.59	5.55	5.14	5.25	5.01	5.63	5.97	4.59
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	5.0	0.0
	44 m.p.h.	0.0	0.4	0.0	0.0	0.0	0.7	10.3	10.7	20.0	0.0
	49 m.p.h.	2.2	2.6	3.2	3.1	1.6	2.2	32.4	35.7	40.0	7.7
	54 m.p.h.	18.9	21.6	19.1	22.7	18.9	20.7	69.1	67.9	65.0	30.8
Bound	No. of vehicles obs.	93	232	29	97	64	135	39	56	12	13
	Average speed	59.1	58.7	58.2	58.7	59.4	58.6	52.3	51.7	50.2	55.7
	No. of vehicles obs.	97	--	39	--	58	--	29	--	8	--
	Average speed	58.6	--	58.7	--	58.5	--	50.4	--	51.8	--
	No. of vehicles obs.	97	--	39	--	58	--	29	--	8	--
	Average speed	58.6	--	58.7	--	58.5	--	50.4	--	51.8	--
	No. of vehicles obs.	93	232	29	97	64	135	39	56	12	13
	Average speed	59.1	58.7	58.2	58.7	59.4	58.6	52.3	51.7	50.2	55.7
	No. of vehicles obs.	97	--	39	--	58	--	29	--	8	--
	Average speed	58.6	--	58.7	--	58.5	--	50.4	--	51.8	--



TABLE 11 SPEED DATA

Station 11 Highway U. S. 31 Location 3.0 Mile South of Rochester Weather Warm-Cloudy  
 No. of Lanes 2 Type of Surface Asphaltic Concrete Last Previous Observation (Speed Report No. 81)  
 Date September 2, 1966 Date September 10, 1965  
 Time 12:00 - 3:15 PM Time 9:00 AM - 12:30 PM

PASSENGER CARS										TRUCKS					
OBSERVATION	All			Indiana		Non-Indiana				All		Less than 5000 pounds		5000 pounds or more	
	Last	Present		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.	261	229		180	178	81	51	99	38	35	29	64	59		
Average speed (m.p.h.)	58.9	63.3		59.5	63.5	57.6	62.8	53.5	55.2	56.6	57.1	51.8	54.3		
Standard deviation	7.54	7.88		7.60	7.59	7.28	8.88	6.82	6.91	8.88	8.09	4.63	6.11		
24 m.p.h.	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29 m.p.h.	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
34 m.p.h.	0.0	0.4		0.0	0.0	0.0	2.0	1.0	0.0	2.9	0.0	0.0	0.0		
39 m.p.h.	0.4	0.9		0.6	0.0	0.0	3.9	1.0	0.0	2.9	0.0	0.0	0.0		
44 m.p.h.	3.8	1.3		3.9	6.0	3.7	3.9	7.1	6.8	8.6	6.9	6.3	6.8		
49 m.p.h.	11.1	3.5		11.7	2.3	9.9	5.9	22.2	18.2	17.1	20.7	25.0	17.0		
54 m.p.h.	25.3	9.2		20.6	8.4	35.8	11.8	58.6	46.6	40.0	31.0	68.8	54.2		
59 m.p.h.	51.7	25.8		48.3	25.8	59.3	25.5	87.9	73.9	68.6	62.1	98.4	79.7		
64 m.p.h.	80.1	59.8		77.8	61.2	85.2	54.9	95.0	88.6	85.7	82.8	100.0	91.5		
69 m.p.h.	92.0	78.6		91.1	78.1	93.8	80.4	97.0	98.9	91.4	96.6	--	100.0		
74 m.p.h.	98.5	92.6		98.3	93.3	98.8	90.2	99.0	98.9	97.1	96.6	--	--		
79 m.p.h.	99.2	97.4		99.4	98.6	98.8	100.0	100.0	100.0	100.0	100.0	--	--		
84 m.p.h.	99.6	99.6		99.4	99.4	100.0	--	--	--	--	--	--	--		
89 m.p.h.	*99.6	100.0		99.4	100.0	--	--	--	--	--	--	--	--		
No. of vehicles obs.	124	229		88	178	36	51	56	88	20	29	36	59		
Average speed	58.3	63.3		60.5	63.5	57.4	62.8	53.8	55.2	54.0	57.1	53.7	54.3		
No. of vehicles obs.	137	--		92	--	45	--	43	--	15	--	28	--		
Average speed	59.6	--		58.6	--	57.8	--	53.2	--	60.1	--	49.4	--		

\* One Car 91 M.P.H.



TABLE 12 SPEED DATA

Station 12 Highway 2 S. R. 25 Location 0.7 Mile West of Americus Weather Warm - Clear

No. of Lanes 2 This Observation Asphaltic Concrete Last Previous Observation (Speed Report No.     )

Date September 1, 1966 Date September 2, 1965

Time 11:00 AM - 2:00 PM Time 1:00 - 4:00 PM

				PASSENGER CARS				TRUCKS			
				All		Indiana		Non-Indiana		All	
				Last	Present	Last	Present	Last	Present	Last	Present
OBSERVATION											
All vehicles	No. of vehicles obs.			216	213	190	186	26	27	64	64
	Average speed (m.p.h.)			57.1	58.6	56.9	58.6	58.1	58.2	52.1	52.7
	Standard deviation			6.72	6.63	6.75	6.66	6.60	6.55	6.14	6.25
	24 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	44 m.p.h.			4.6	2.8	5.3	2.7	0.0	3.7	9.4	7.8
	49 m.p.h.			12.0	8.9	12.6	8.6	7.7	11.1	31.3	29.7
	54 m.p.h.			34.7	26.8	35.3	27.4	30.8	22.2	68.8	67.2
% of vehicles traveling at or less than	59 m.p.h.			63.9	49.8	64.2	51.1	61.5	40.7	87.5	87.5
	64 m.p.h.			85.7	81.7	86.3	80.1	80.8	92.6	95.3	93.8
	69 m.p.h.			97.5	98.1	97.4	97.9	96.2	100.0	100.0	100.0
	74 m.p.h.			99.5	100.0	99.5	100.0	100.0	--	--	--
	79 m.p.h.			100.0	--	100.0	--	--	--	--	--
	84 m.p.h.			--	--	--	--	--	--	--	--
	89 m.p.h.			--	--	--	--	--	--	--	--
	No. of vehicles obs.			140	213	123	186	17	27	40	64
	Average speed			56.2	58.6	56.1	58.6	56.7	58.2	50.8	52.7
	No. of vehicles obs.			76	--	67	--	9	--	24	--
Bound	Average speed			58.7	--	58.4	--	60.8	--	54.3	--





TABLE 13 SPEED DATA

Station 1, 2, 3, 4 Highway            Interstate            Location            See Individual Stations           

No. of Lanes            This Observation            Type of Surface            Last Previous Observation (Speed Report No.           )

Date            Date            Weather           

Time            Time           

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
OBSERVATION		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.		999	951	568	601	431	350	401	284	77	89	324	195
Average speed (m.p.h.)		61.5	62.5	61.2	62.1	62.1	63.3	53.9	55.3	54.9	56.1	53.6	54.9
Standard deviation		6.99	6.04	7.35	5.99	6.46	6.06	5.31	5.40	7.02	6.79	4.80	4.59
24 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.		0.1	0.0	0.0	0.0	0.2	0.0	0.8	0.7	1.3	0.0	0.6	1.0
44 m.p.h.		1.3	0.1	1.4	0.2	1.2	0.0	5.0	4.6	5.2	6.7	4.9	4.6
49 m.p.h.		5.8	1.2	7.4	1.3	3.7	0.9	19.5	12.3	27.3	15.7	17.6	10.8
54 m.p.h.		15.2	7.5	16.9	8.5	13.0	5.7	53.1	36.3	42.9	36.0	55.6	36.4
59 m.p.h.		32.7	28.4	35.7	30.0	28.8	25.7	84.3	82.0	71.4	68.5	87.4	88.2
64 m.p.h.		66.3	63.0	68.5	65.7	63.3	58.3	97.8	97.2	89.6	92.1	99.7	99.5
69 m.p.h.		90.1	87.2	89.4	89.5	91.0	83.1	100.0	98.9	100.0	96.6	100.0	100.0
74 m.p.h.		97.5	97.3	97.0	97.8	98.1	96.3	--	100.0	--	100.0	--	--
79 m.p.h.		99.3	99.2	99.1	99.5	99.5	98.6	--	--	--	--	--	--
84 m.p.h.		99.9	99.8	99.8	99.7	100.0	100.0	--	--	--	--	--	--
89 m.p.h.		100.0	*99.9	100.0	*99.8	--	--	--	--	--	--	--	--
No. of vehicles obs.		--	--	--	--	--	--	--	--	--	--	--	--
Average speed		--	--	--	--	--	--	--	--	--	--	--	--
No. of vehicles obs.		--	--	--	--	--	--	--	--	--	--	--	--
Average speed		--	--	--	--	--	--	--	--	--	--	--	--

\* One Car 90 M.P.H.



## SPEED DATA

See Individual Stations

Wednesday, 22nd

[illegible]



Station 9,10,11,12 Highway 2 Lanes Location See Individual Stations

No. of Lanes This Observation Type of Surface Last Previous Observation (Speed Report No. ) Weather

Date Date  
Time Time

				PASSENGER CARS				TRUCKS			
				All		Indiana		Non-Indiana		All	
OBSERVATION				Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.				872	899	536	576	336	323	362	303
Average speed (m.p.h.)				58.1	59.9	58.2	60.1	57.9	59.5	51.7	52.0
Standard deviation				6.83	7.12	7.10	7.22	6.40	6.94	6.39	6.70
24 m.p.h.				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.				0.0	0.1	0.0	0.0	0.0	0.3	0.6	0.3
39 m.p.h.				0.2	0.2	0.4	0.0	0.0	0.6	1.4	1.7
44 m.p.h.				3.2	1.7	3.6	1.6	2.7	1.9	11.1	12.5
49 m.p.h.				9.9	6.5	11.1	6.4	8.0	6.5	35.9	35.6
54 m.p.h.				28.3	21.8	27.7	21.4	29.2	22.6	67.7	67.0
59 m.p.h.				58.6	44.1	57.6	42.5	60.1	46.8	89.5	87.1
64 m.p.h.				83.9	76.8	82.5	75.5	86.0	79.0	97.0	94.4
69 m.p.h.				95.3	91.8	94.5	91.5	96.4	92.3	99.2	99.7
74 m.p.h.				99.2	97.8	98.9	97.7	99.7	97.8	99.7	99.7
79 m.p.h.				99.7	99.3	99.6	99.0	99.7	100.0	100.0	100.0
84 m.p.h.				99.9	99.9	99.8	99.8	100.0	--	--	--
89 m.p.h.				*99.9	100.0	*99.8	100.0	--	--	--	--
No. of vehicles obs.				--	--	--	--	--	--	--	--
Average speed				--	--	--	--	--	--	--	--
No. of vehicles obs.				--	--	--	--	--	--	--	--
Average speed				--	--	--	--	--	--	--	--

\* One Car, 91, M.P.H.



Station 1 Thru 12 Highway All Systems Location See Individual Stations

No. of Lanes This Observation Type of Surface Last Previous Observation (Speed Report No. )  
Date Date  
Time Time

Weather

				PASSENGER CARS						TRUCKS							
				All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more			
OBSERVATION				Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present		
No. of vehicles obs.				2854	2828	1705	1816	1149	1012	1153	939	289	252	864	687		
Average speed (m.p.h.)				60.3	62.0	59.9	61.8	60.9	62.4	53.1	53.8	54.9	56.7	52.6	52.7		
Standard deviation				6.95	6.88	7.17	6.95	6.57	6.74	5.83	6.37	7.24	7.03	5.18	5.75		
All vehicles at or less than 24 of vehicles traveling				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.4	0.0	0.1	0.2
				0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.9	1.7	1.0	0.4	0.8	2.2
				2.0	0.9	2.3	1.1	1.6	0.7	1.6	0.7	6.9	8.1	6.9	6.8	6.9	8.6
				6.7	3.5	8.2	3.7	4.5	3.0	4.5	3.0	25.5	23.0	24.6	13.9	25.8	26.4
				19.5	12.4	21.5	13.2	16.5	11.1	16.5	11.1	58.9	50.7	47.1	32.9	62.9	57.2
				41.8	31.6	44.5	32.4	37.7	30.1	37.7	30.1	86.3	83.1	73.0	64.7	90.7	89.8
				73.2	64.2	74.8	65.6	70.7	61.7	70.7	61.7	97.0	95.3	90.3	85.7	99.2	98.8
				92.1	86.0	92.0	86.9	92.3	84.4	92.3	84.4	99.6	99.5	98.3	98.0	100.0	100.0
Bound				98.6	96.9	98.4	96.8	98.8	96.9	99.9	99.8	99.7	99.2	--	--		
				99.6	99.1	99.5	99.0	99.7	99.1	99.7	99.1	100.0	100.0	100.0	--	--	
				99.9	99.9	99.9	99.8	100.0	100.0	100.0	100.0	--	--	--	--	--	
				99.9	100.0	*99.9	*99.9	--	--	--	--	--	--	--	--	--	
No. of vehicles obs.				--	--	--	--	--	--	--	--	--	--	--			
Average speed				--	--	--	--	--	--	--	--	--	--	--	--		
No. of vehicles obs.				--	--	--	--	--	--	--	--	--	--	--	--		
Average speed				--	--	--	--	--	--	--	--	--	--	--	--		

\* One Car 90 M.P.H.  
\*\* One Car 91 M.P.H.





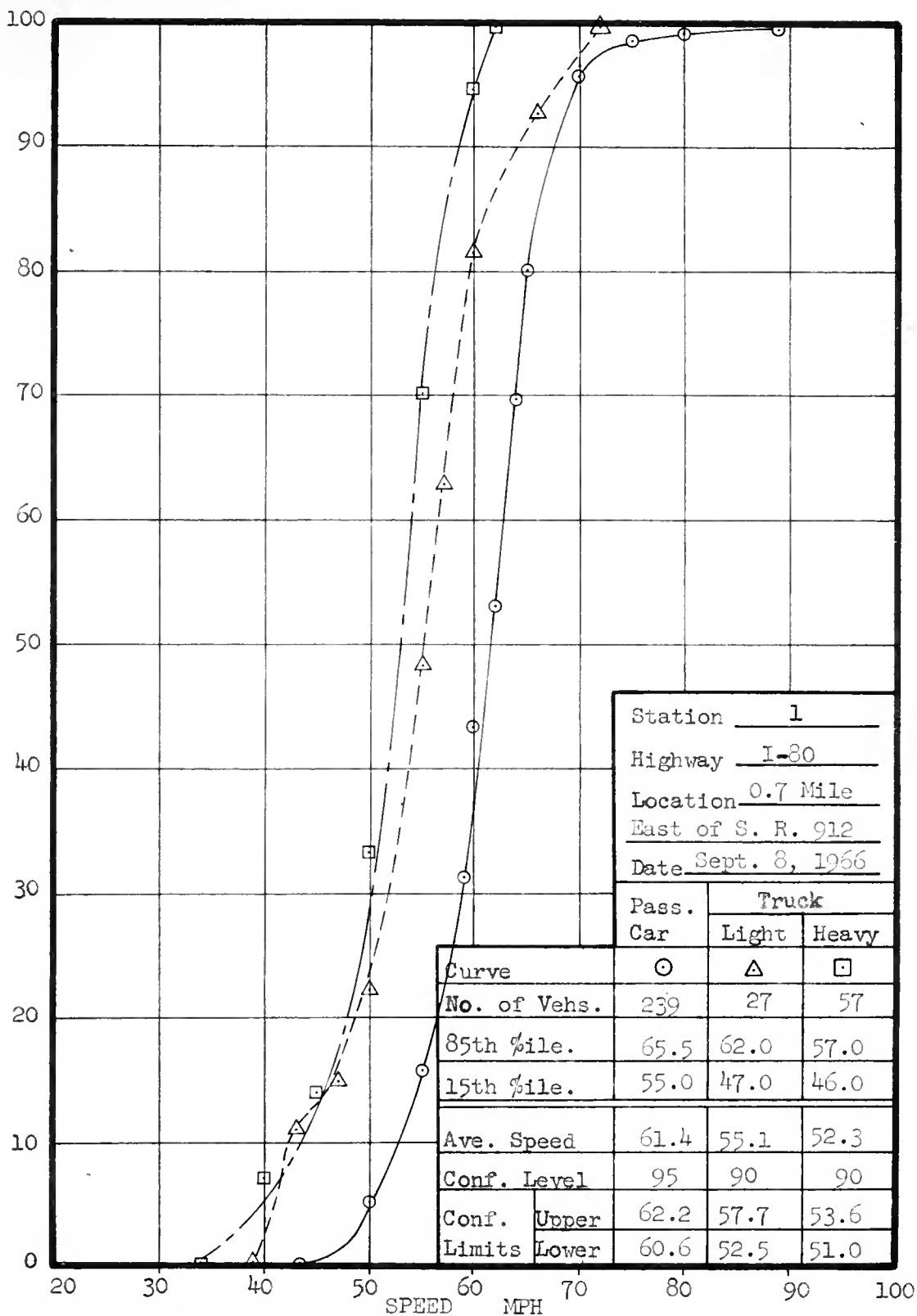


Figure 1

Accumulative Speed Curves,  
Station 1, Interstate Highway



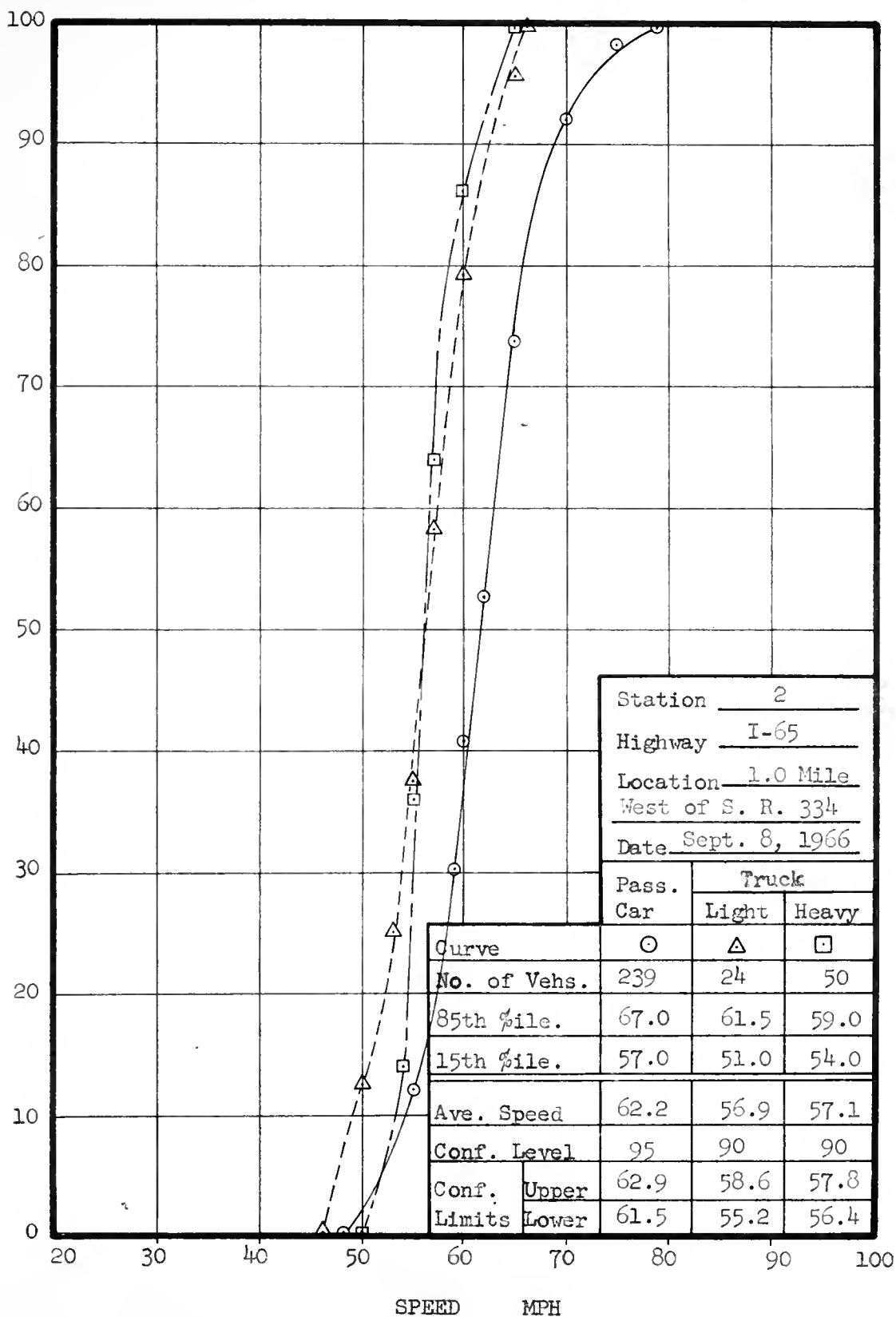


Figure 2  
Accumulative Speed Curves,  
Station 2, Interstate Highway



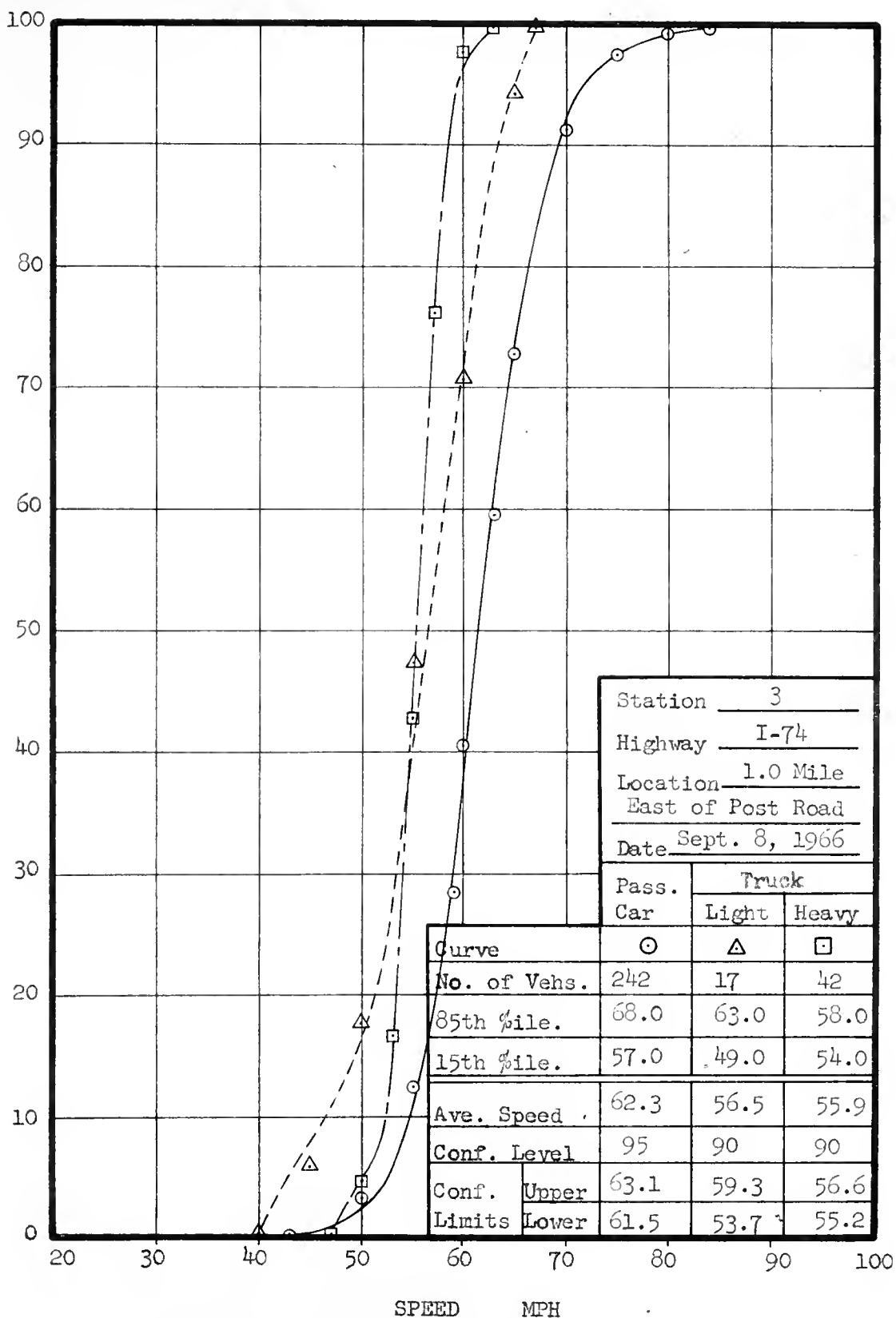


Figure 3  
Accumulative Speed Curves,  
Station 3, Interstate Highway



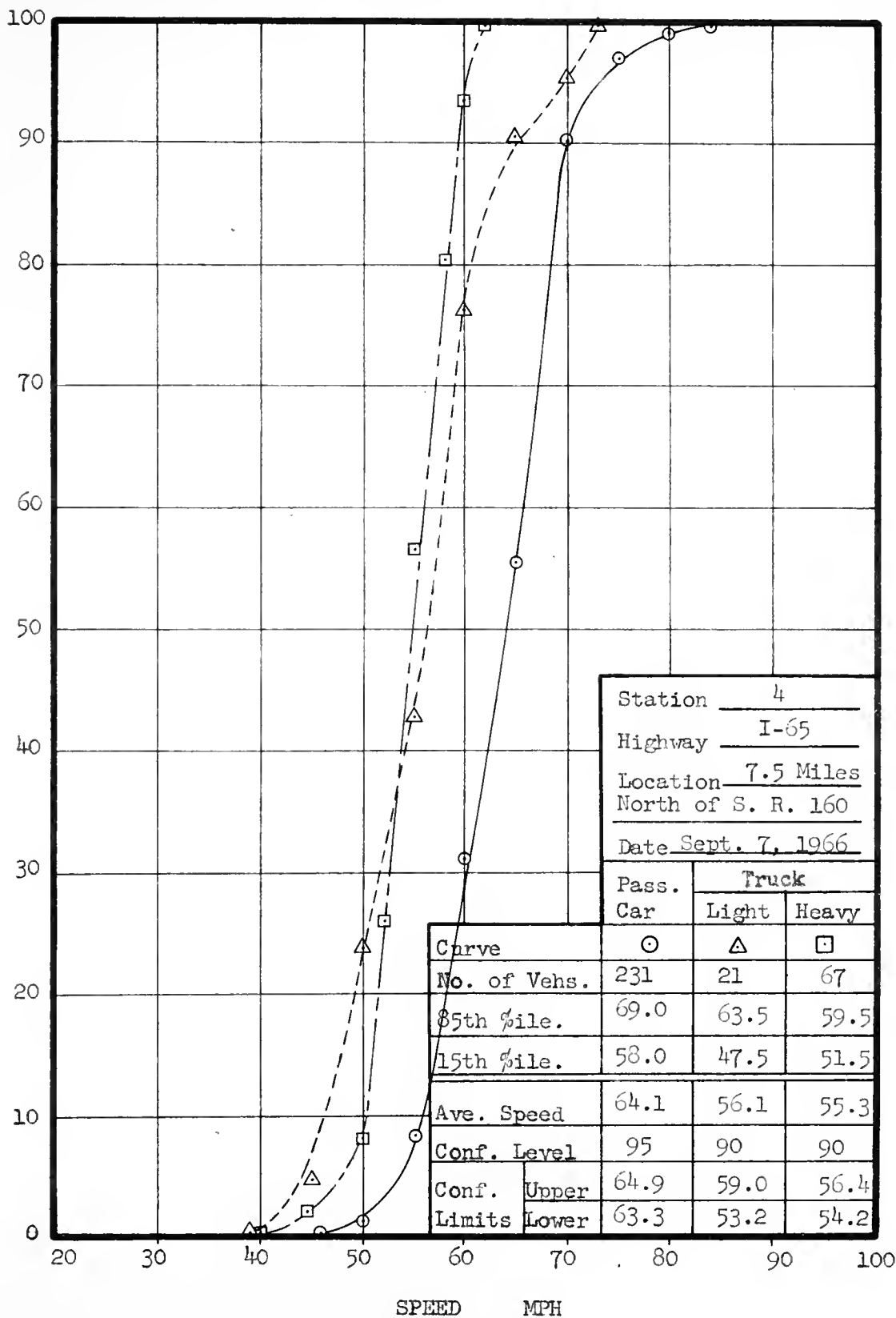


Figure 4

Accumulative Speed Curves,  
Station 4, Interstate Highway





PERCENTILE

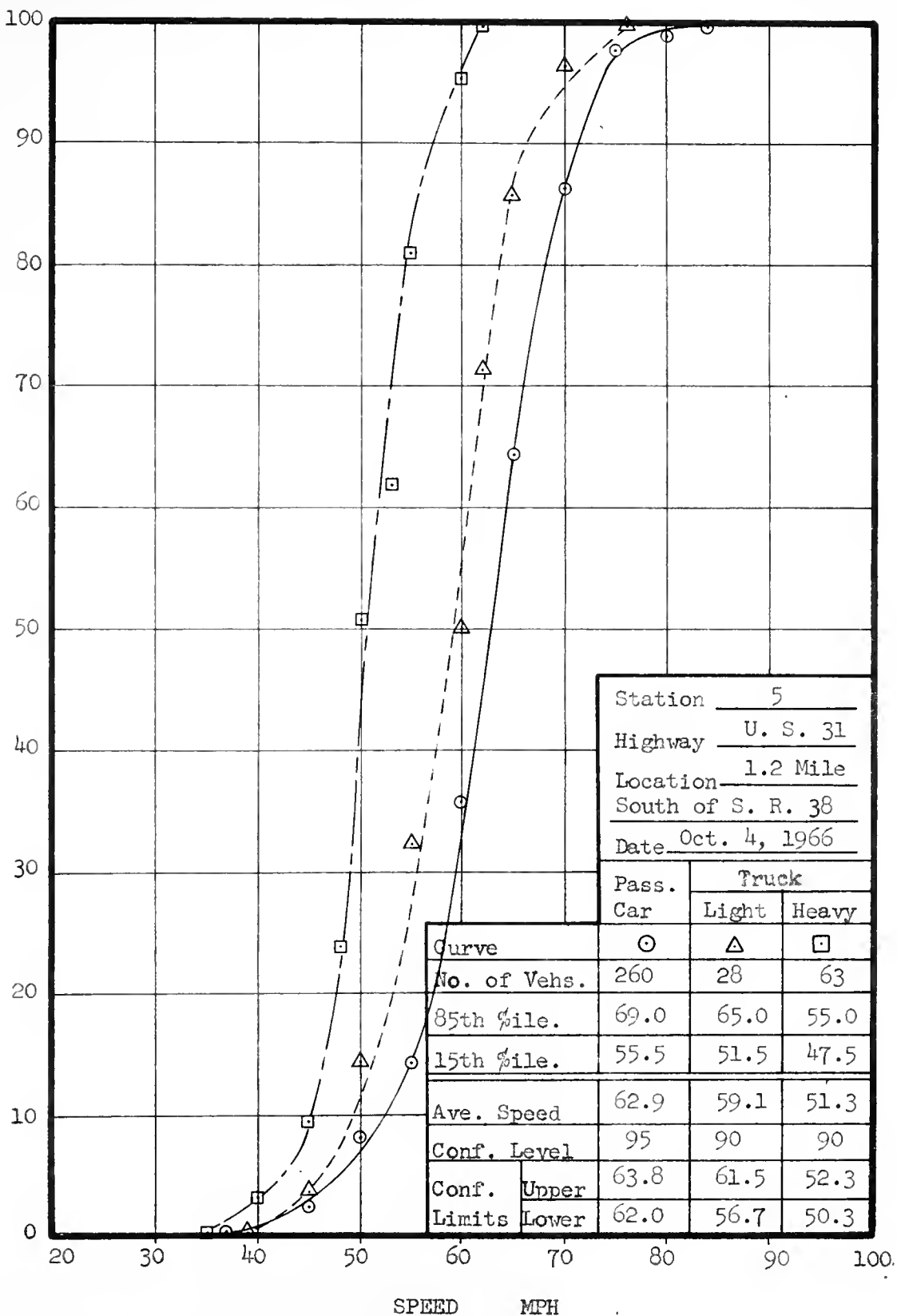


Figure 5  
Accumulative Speed Curves,  
Station 5, 4-Lane Divided Highway



PERCENTILE

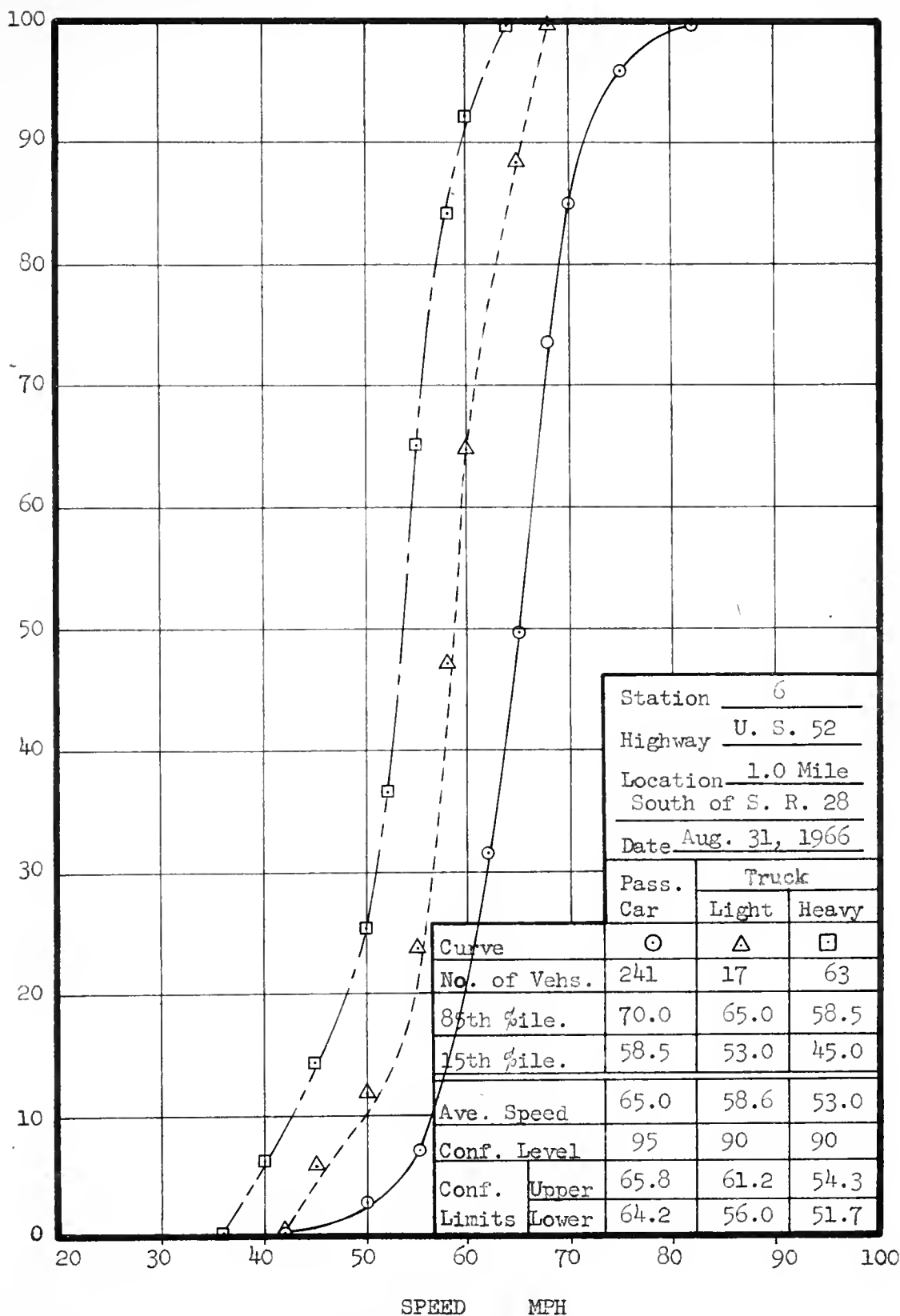


Figure 6  
Accumulative Speed Curves,  
Station 6, 4-Lane Divided Highway



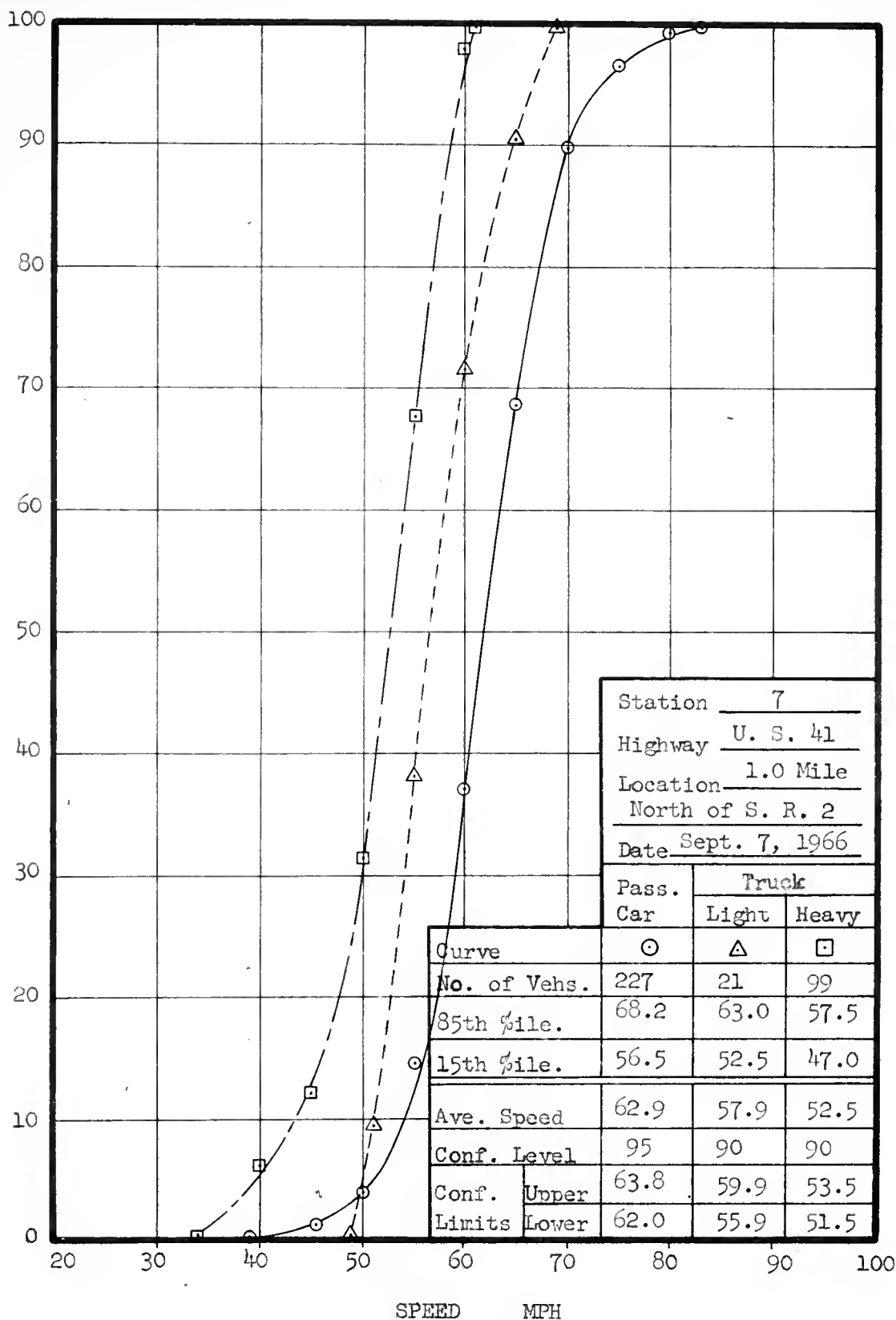


Figure 7

Accumulative Speed Curves,  
Station 7, 4-Lane Divided Highway









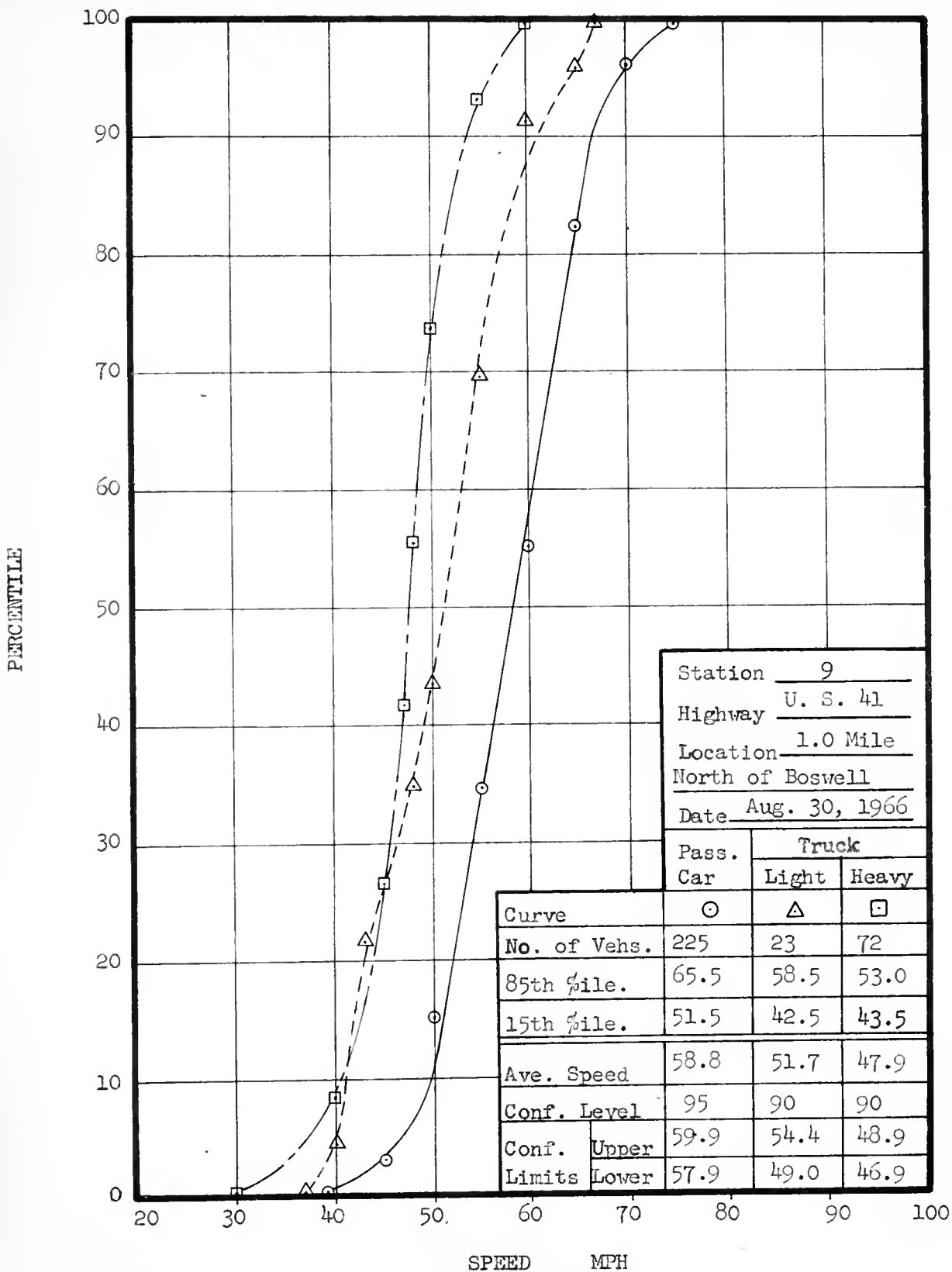


Figure 9  
 Accumulative Speed Curves,  
 Station 9, 2-Lane Highway



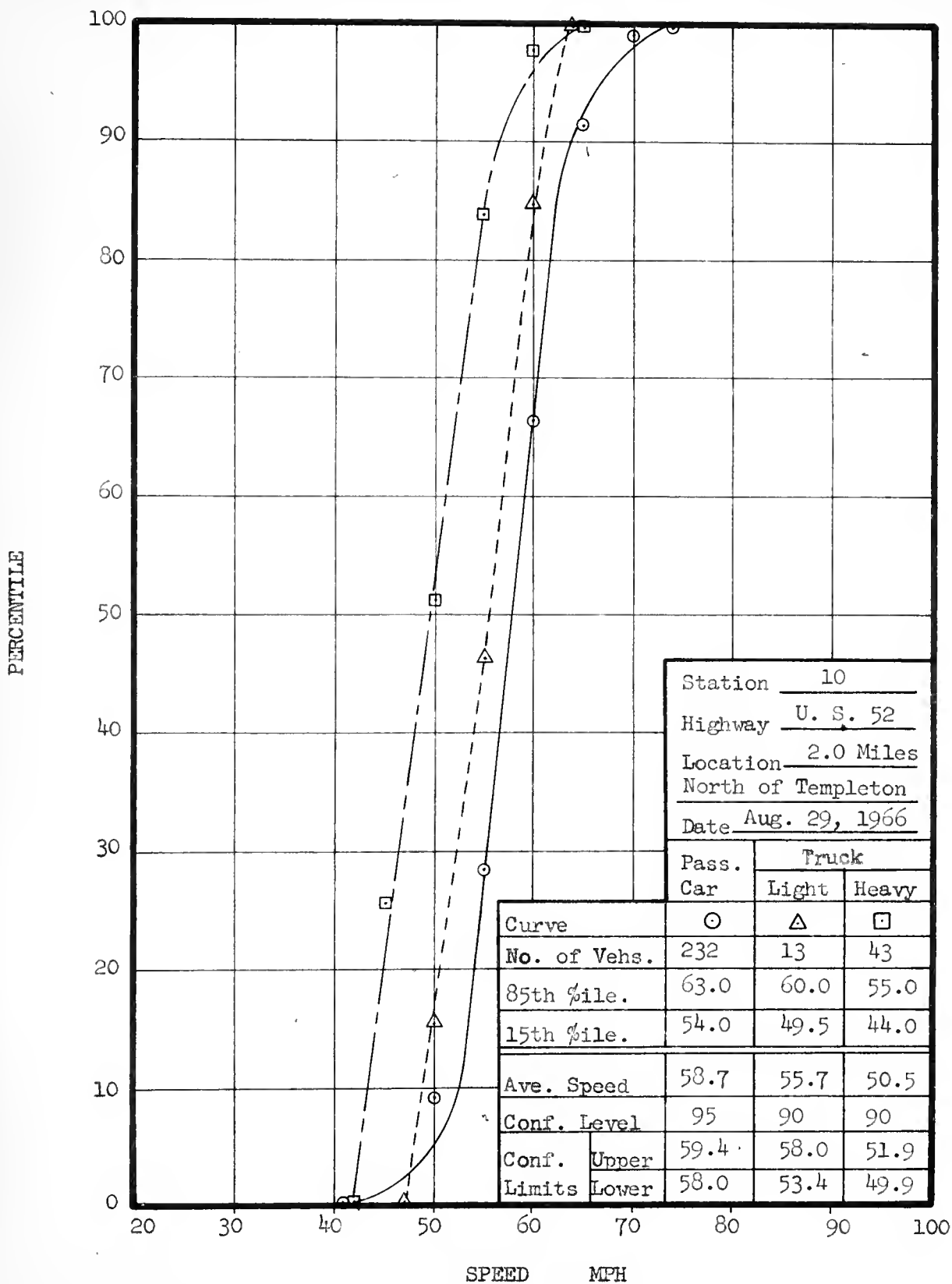


Figure 10  
Accumulative Speed Curves,  
Station 10, 2-Lane Highway



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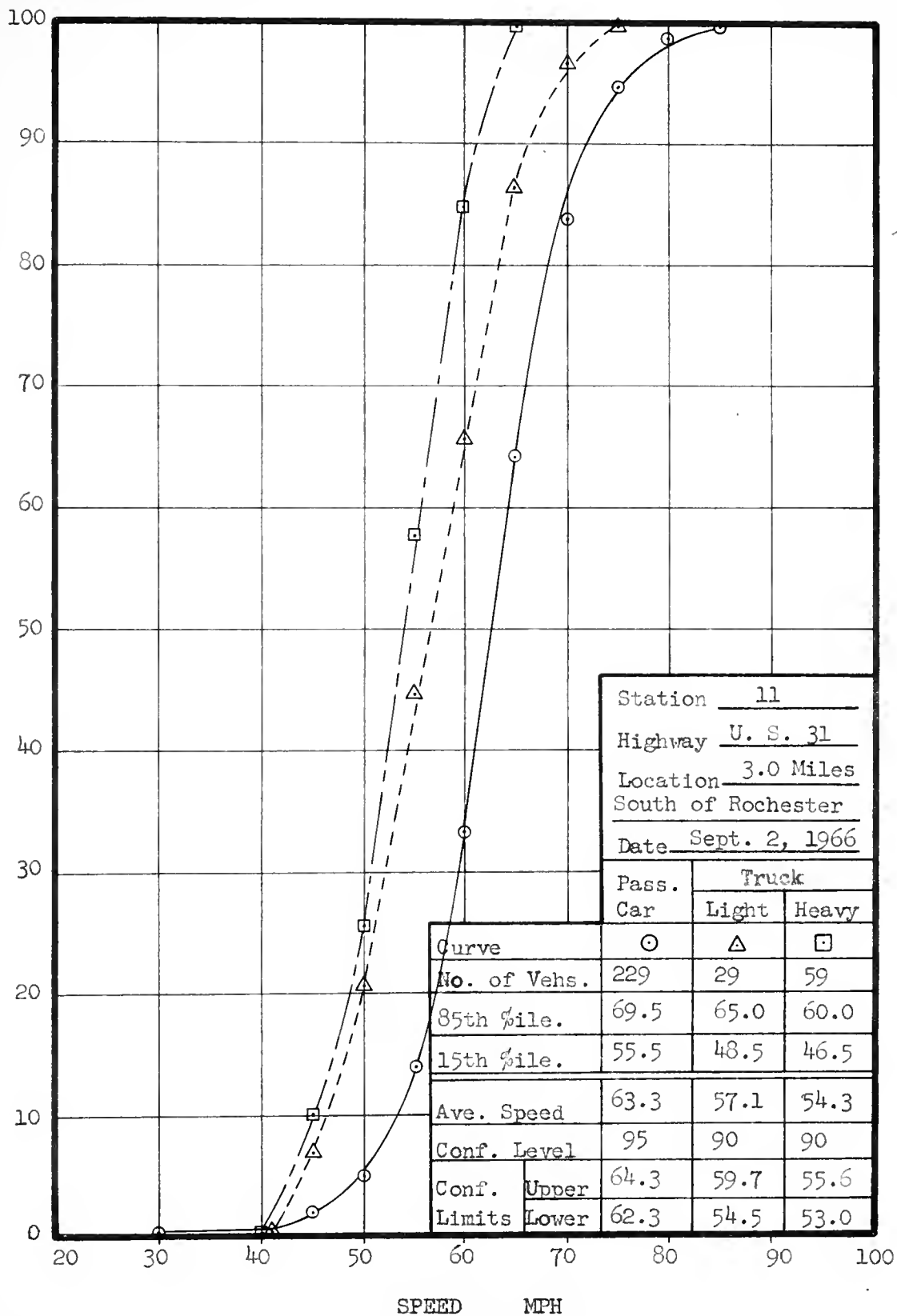


Figure 11

Accumulative Speed Curves,  
Station 11, 2-Lane Highway



PERCENTILE

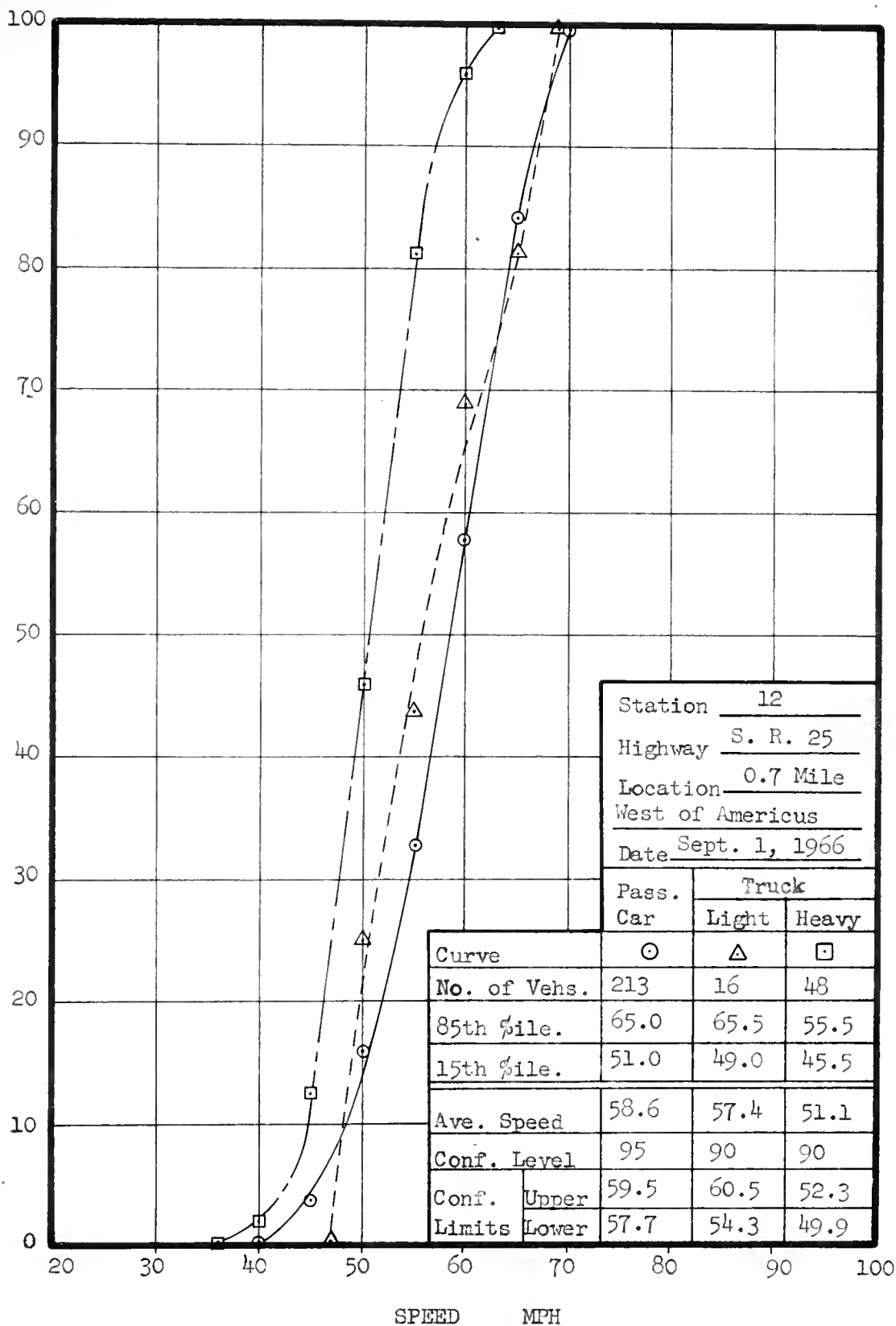


Figure 12

Accumulative Speed Curves,  
Station 12, 2-Lane Highway





PERCENTILE

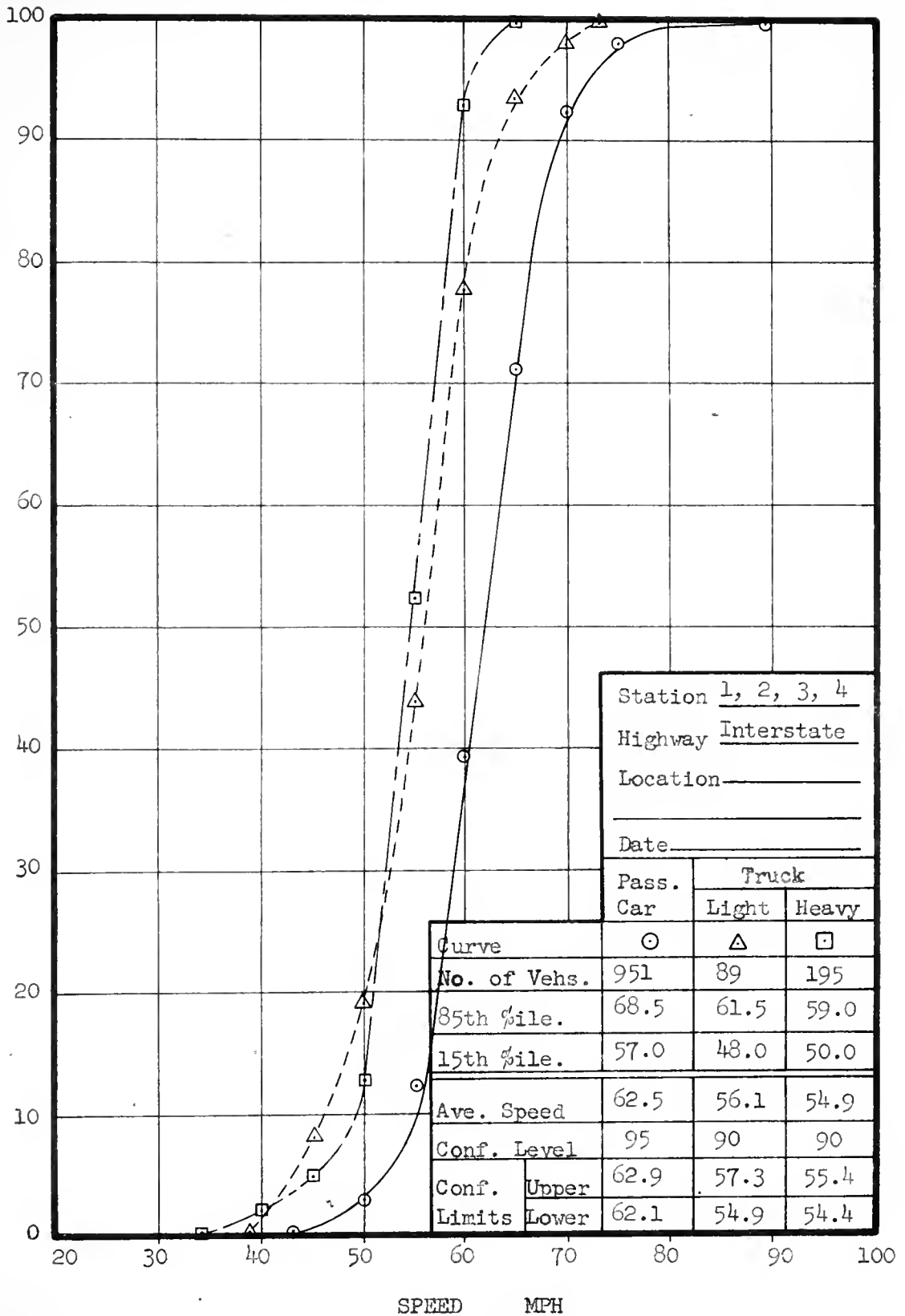


Figure 13

Accumulative Speed Curves,  
All Interstate Highways



PERCENTILE

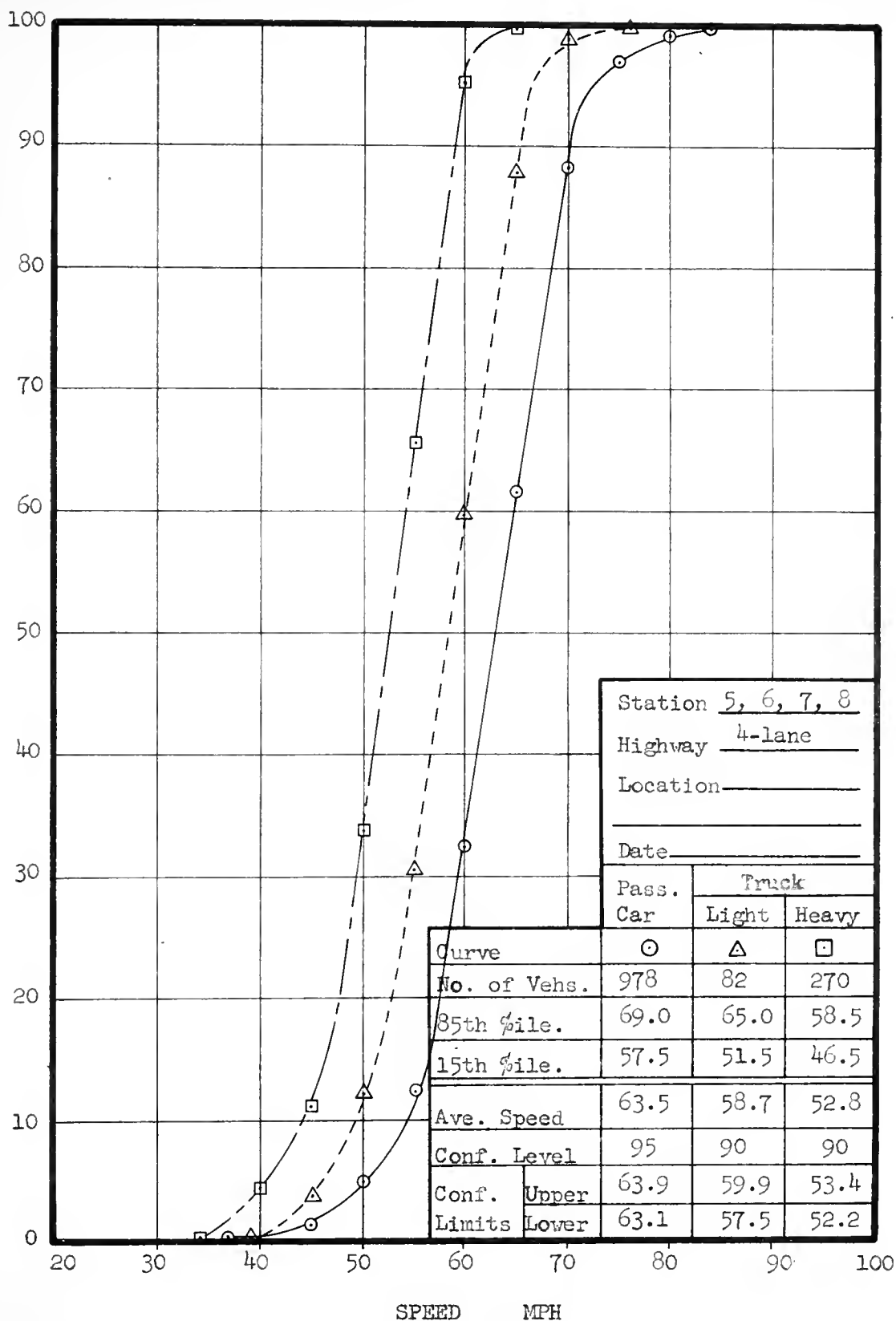


Figure 14  
 Accumulative Speed Curves  
 All 4-Lane Divided Highways



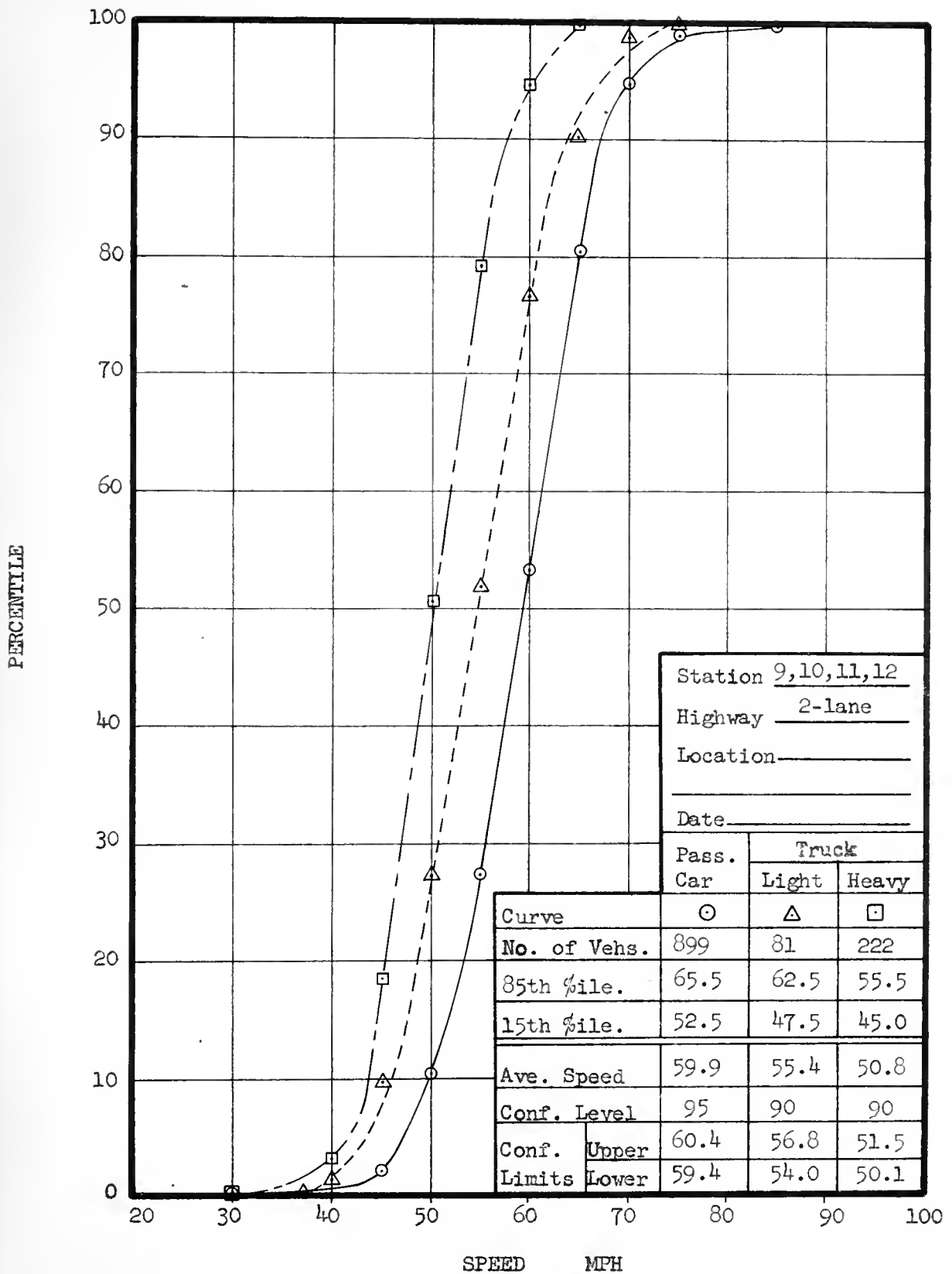


Figure 15  
Accumulative Speed Curves,  
All 2-Lane Highways



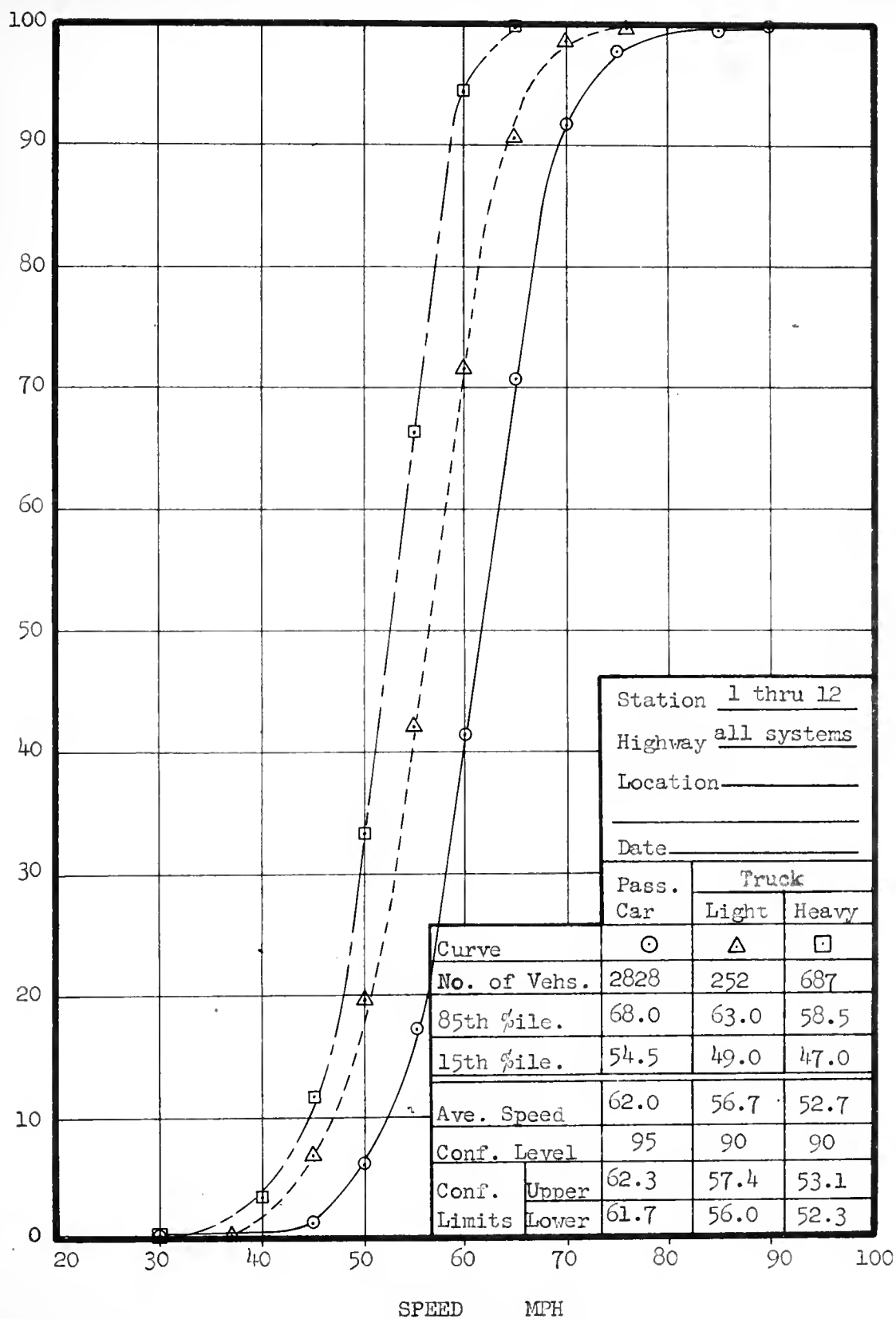


Figure 16

Accumulative Speed Curves,  
All Highway Systems







